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Teachers' Perceptions and Instructional Strategies for Developing Cognitive Skills among Students with Intellectual Disabilities: Evidence from Bhavita Centers in Coastal Districts of Andhra Pradesh

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ABSTRACT

The present study, entitled *Teaching Strategies for Students with Intellectual Disabilities: A Study of Bhavita Centers in Coastal Districts of Andhra Pradesh*, was undertaken to examine teachers' perceptions of the cognitive skills of students with intellectual disabilities and to identify the instructional strategies employed to enhance their cognitive development. The study also investigated differences in teachers' perceptions with respect to district, educational qualification, teaching experience, and gender. A normative survey method was adopted, and the study included all 75 teachers working in Bhavita Centers across the coastal districts of Krishna, Nellore, and Srikakulam, Andhra Pradesh, selected through a random sampling technique. Data were collected using the Teaching Strategies Questionnaire Scale developed by the investigator (2025), covering four key instructional domains: health and hygiene, content adaptation, teaching and learning materials (TLM), and positive reinforcement methods. The findings revealed that teachers perceived the cognitive skills of students with intellectual disabilities to be at a moderate level, indicating the need for structured and evidence-based instructional interventions. Among the instructional strategies, teaching and learning materials and content adaptation received the highest emphasis, whereas positive reinforcement strategies received comparatively less attention. No significant differences were observed in teachers' perceptions based on district, educational qualification, or gender; however, teaching experience significantly influenced teachers' perceptions, with less experienced teachers demonstrating relatively higher perception levels than their more experienced counterparts. The study concludes that continuous professional development, effective utilization of adaptive teaching materials, and the adoption of evidence-based instructional strategies are essential for enhancing the cognitive development of students with intellectual disabilities. The findings offer valuable implications for teacher education, special education practice, and educational policy aimed at improving learning outcomes for students with intellectual disabilities.

Keywords: Intellectual Disabilities, Teachers' Strategies, Cognitive Skills, Bhavita Centers, Special Education.

I. INTRODUCTION

Education is a fundamental human right and a powerful tool for individual and social development. In recent decades, there has been a growing global emphasis on providing equitable and inclusive education to all learners, including those with disabilities. Among various categories of disabilities, intellectual disability presents unique challenges in terms of learning, adaptive behaviour, and social integration. Students with intellectual disabilities often require specialized instructional approaches, individualized attention, and supportive learning environments to achieve their full potential.

Intellectual disability is characterized by significant limitations in intellectual functioning and adaptive behaviour, which affects conceptual, social, and practical skills. These limitations originate before the age of eighteen and influence the individual's ability to learn, communicate, and perform daily activities independently. Due to these challenges, students with intellectual disabilities cannot benefit fully from traditional teaching methods used in general classrooms. Therefore, it becomes essential for teachers to adopt appropriate strategies that cater to their specific learning needs.

Teachers play a crucial role in shaping the educational experiences of students with intellectual disabilities. Their attitudes, competencies, and instructional practices significantly influence student learning outcomes. Effective teaching strategies such as individualized instruction, task analysis, activity-based learning, use of visual aids, reinforcement techniques, and continuous assessment are essential for promoting meaningful learning among these students. Moreover, teachers must be equipped with professional skills and training to address diverse learning needs and create inclusive classroom environments.

In India, various initiatives have been undertaken to support the education of children with disabilities. Policies such as the Right to Education Act (2009) and the Rights of Persons with Disabilities Act (2016) emphasize inclusive education and equal opportunities for all learners. In this context, special institutions like Bhavita Centers have emerged as significant platforms for providing educational and rehabilitative services to children with intellectual disabilities. These centers focus on developing cognitive, social, and adaptive skills through structured programs and specialized teaching methods.

Bhavita Centers in Coastal districts of Andhra Pradesh play a vital role in catering to the educational needs of students with intellectual disabilities. These centers provide individualized care, therapeutic interventions, and skill-based training to enhance the overall development of learners. Teachers working in these centers are expected to use a variety of strategies tailored to the abilities and needs of each student. However, the effectiveness of these strategies depends on several factors, including teacher training, availability of resources, institutional support, and awareness of inclusive practices.

Despite the growing importance of special education, there is a need to systematically examine the teaching strategies adopted by teachers in Bhavita Centers. Understanding these strategies can help identify best practices, highlight challenges, and suggest improvements for enhancing the quality of education. It is also essential to explore how teachers adapt their methods to address the diverse needs of students with intellectual disabilities and how these practices influence student learning and development.

The present study, therefore, focuses on analyzing the strategies used by teachers to teach students with intellectual disabilities in Bhavita Centers in Coastal districts of Andhra Pradesh. By examining these strategies, the study aims to contribute to the existing body of knowledge in special education and provide insights for improving teaching practices. The findings of this study are expected to be useful for teachers, teacher educators, policymakers, and researchers in the field of special and inclusive education.

The success of educational programs for students with intellectual disabilities largely depends on the effectiveness of teaching strategies and the preparedness of teachers. There is a growing need to strengthen teacher training programs, provide adequate resources, and promote innovative teaching practices to ensure meaningful learning experiences for all students. This study attempts to address these aspects by providing a comprehensive analysis of teaching strategies in Bhavita Centers, thereby contributing to the advancement of inclusive and special education in Coastal districts of Andhra Pradesh.

II. NEED AND SIGNIFICANCE OF THE STUDY

Education for students with intellectual disabilities has gained increasing attention in recent years due to the global emphasis on inclusive and equitable education. Despite progressive policies and legal frameworks, the actual implementation of effective teaching practices for students with intellectual disabilities remains a challenge, particularly at the institutional level. In this context, understanding the strategies adopted by teachers becomes essential for improving the quality of education provided to these learners. The present study, focusing on Bhavita Centers in Coastal districts of Andhra Pradesh, is undertaken to address this important need.

One of the primary needs of this study arises from the diverse learning requirements of students with intellectual disabilities. These students often experience difficulties in cognitive functioning, communication, social interaction, and adaptive behaviour. Traditional teaching methods are often insufficient to meet their unique needs. Therefore, it is crucial to explore and analyze the specific strategies used by teachers to facilitate effective learning. By identifying appropriate and effective instructional practices, the study aims to contribute to the development of more inclusive and learner-centered teaching approaches.

Another significant need for this study lies in the limited research available on teaching strategies specifically employed in Bhavita Centers. While several studies have been conducted on inclusive education and special education practices, there is a lack of focused research on institutional settings like Bhavita Centers in Coastal districts of Andhra Pradesh. These centers play a vital role in providing specialized education and rehabilitation services to children with intellectual disabilities. However, there is insufficient documentation and analysis of how teachers in these centers address the diverse needs of their students. This study attempts to fill this research gap by providing empirical evidence on teaching strategies used in these settings.

The study is also needed to examine the preparedness and professional competencies of teachers working with students with intellectual disabilities. Effective teaching in special education requires not only subject knowledge but also specialized skills such as individualized instruction, behavior management, use of teaching aids, and continuous assessment techniques. In many cases, teachers may not receive adequate training or professional support to implement these strategies effectively. By analyzing the current practices, the study highlights areas where teachers may require additional training and support, thereby contributing to the improvement of teacher education programs.

The need for this study is reinforced by the challenges faced in the implementation of inclusive education policies. Although policies such as the Right to Education Act (2009) and the Rights of Persons with Disabilities Act (2016) advocate inclusive education, their effective execution depends largely on classroom practices. Teachers are the key agents in translating policy into practice. Therefore, understanding the strategies they use and the challenges they encounter is essential for ensuring that policy

objectives are achieved. This study provides insights into the ground realities of teaching students with intellectual disabilities, thereby helping bridge the gap between policy and practice.

The significance of the study lies in its potential to improve the educational outcomes of students with intellectual disabilities. By identifying effective teaching strategies, the study provides practical guidance for teachers working in similar settings. The findings can help educators adopt more appropriate and innovative methods that enhance student engagement, learning, and overall development. Improved teaching practices can lead to better cognitive, social, and adaptive skills among students, enabling them to become more independent and socially integrated.

Another important significance of the study is its contribution to teacher education and professional development. The results of the study can be used to design training programs that focus on practical teaching strategies and classroom management techniques for students with intellectual disabilities. Teacher educators can incorporate these findings into their curriculum, ensuring that future teachers are better prepared to handle diverse learning needs. This, in turn, strengthens the overall quality of special and inclusive education.

The present study is both necessary and significant as it addresses critical gaps in knowledge and practice related to teaching students with intellectual disabilities in Bhavita Centers. It aims to enhance teaching effectiveness, support teacher development, inform policy decisions, and ultimately improve the quality of education and life outcomes for students with intellectual disabilities.

III. REVIEW OF RELATED LITERATURE

Sharma (2020) conducted a study entitled *Teaching Strategies for Students with Intellectual Disabilities in Inclusive Classrooms* with a sample of 60 special and general educators to examine the effectiveness of instructional strategies used in inclusive settings. The study found that individualized instruction, peer tutoring, and visual aids significantly improved student engagement and learning outcomes, while teachers with special education training demonstrated greater effectiveness in implementing adaptive instructional strategies. Similarly, Reddy and Kumar (2021) investigated instructional practices adopted by 45 teachers in special schools of Andhra Pradesh and reported that activity-based learning, task analysis, and reinforcement techniques positively contributed to the cognitive and functional development of children with intellectual disabilities, although inadequate training and limited teaching resources remained major challenges. Lakshmi (2021) examined the role of teacher competence among 50 special school teachers and found a strong positive relationship between teachers' professional competence and students' cognitive and adaptive behaviour, emphasizing the need for continuous professional development. Rao and Devi (2022), in their study of 70 teachers from inclusive schools, reported that differentiated instruction, individualized education plans (IEPs), and assistive technologies significantly enhanced student participation, academic achievement, and classroom engagement, highlighting the importance of supportive learning environments. Kumar and Singh (2022) studied 55 teachers from special and inclusive schools to identify challenges in teaching students with intellectual disabilities and found that inadequate training, insufficient teaching-learning materials, and overcrowded classrooms were the major barriers to effective instruction despite teachers maintaining positive attitudes towards inclusive education. Devi (2023) evaluated the effectiveness of activity-based learning among 40 students and 20 teachers from special schools and concluded that activity-oriented instructional methods significantly improved students' cognitive skills, social interaction, and classroom participation, recommending their integration into regular teaching practices. Prasad and Rao (2023) examined the use of teaching aids among 35 teachers

working in Bhavita Centers and found that visual aids, audio-visual materials, and manipulatives enhanced students' understanding, retention, and participation, although the lack of adequate instructional resources limited their effective use. Suresh (2024) investigated the attitudes of 80 teacher educators towards inclusive education and reported that while teachers generally held positive attitudes, they lacked sufficient practical skills and specialized training to effectively teach students with intellectual disabilities, thereby emphasizing the need for reforms in teacher education programmes. Rani and Kumar (2024) compared the perceptions of 50 parents and 50 teachers regarding the adaptive behaviour of children with intellectual disabilities and found that both groups observed improvements in daily living skills and social adjustment when appropriate teaching strategies were implemented, highlighting the importance of parent-teacher collaboration. More recently, Naidu (2025) explored innovative teaching strategies among 60 teachers from special education centres in Coastal districts of Andhra Pradesh and reported that technology-integrated instruction, individualized learning plans, and continuous assessment significantly enhanced students' cognitive development and overall learning outcomes. Collectively, these studies indicate that effective instructional strategies, teacher competence, adaptive teaching methods, activity-based learning, appropriate teaching-learning materials, and continuous professional development play a crucial role in improving the cognitive and adaptive skills of students with intellectual disabilities, while also identifying the need for enhanced teacher training, adequate resources, and supportive educational environments.

IV. OBJECTIVES OF THE STUDY

1. To find out and compare the perceptions of teachers towards the cognitive skills of intellectually disabled children.

2. To find out the different strategies used by teachers to develop cognitive abilities of intellectually disabled children in Bhavila Centres with respect to the following areas: a) Health and Hygiene

a. Conversion of Content
b. Teaching and Learning Materials (TLM)
c. Positive Reinforcement Methods

3. To find out and compare the perceptions of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to the following variables

a. District (Krishna, Nellore, Srikakulam)
b. Educational Qualification (Trained / Untrained)
c. Teaching Experience
d. Gender

V. HYPOTHESES OF THE STUDY

1. There would be no significant difference in the perceptions of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to district (Krishna, Nellore, Srikakulam).
2. There would be no significant difference in the perceptions of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to educational qualification (Trained / Untrained).
3. There would be no significant difference in the perceptions of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to teaching experience.

4. There would be no significant difference in the perceptions of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to gender.

VI. VARIABLES OF THE STUDY

Table - 1 Classification of Variables

S.NO	Dependent variables	Independent Variables
1	Cognitive Skills and Adaptive Behaviour	Teachers' Strategies **Demographical Variables** a) District (Krishna, Nellore, Srikakulam) b) Educational Qualification (Trained / Untrained) c) Teaching Experience d) Gender

VII. METHOD OF THE STUDY

The present study adopted the normative survey method, as it is appropriate for collecting, describing, and analyzing data related to existing conditions. The population comprised 75 teachers working with students with intellectual disabilities in Bhavita Centers located in the coastal districts of Andhra Pradesh. Since the population size was manageable, all 75 teachers were included in the study. A random sampling technique was employed to ensure that the sample was representative of the population, thereby enhancing the reliability and generalizability of the findings. The selected sample consisted of teachers serving in Bhavita Centers across the coastal districts of Andhra Pradesh.

To achieve the objectives of the study, an appropriate research tool was developed and administered to collect the required data. The selection of the tool was guided by the nature and objectives of the investigation, the availability of suitable instruments, and the investigator's ability to administer and interpret the responses effectively. The collected data were systematically organized and analyzed using appropriate statistical techniques to draw meaningful conclusions regarding the teaching strategies adopted by teachers of students with intellectual disabilities.

VIII. TOOL OF THE STUDY

The present study utilized the Teaching Strategies Questionnaire Scale, which was developed by the investigator (2025) to assess the teaching strategies adopted by teachers working with students with intellectual disabilities. The development of the instrument was guided by the objectives of the study, an extensive review of related literature, and expert consultation to ensure its relevance and comprehensiveness. The questionnaire was designed to collect reliable and valid data on various dimensions of teaching strategies, thereby facilitating an accurate assessment of teachers' instructional practices.

IX. DATA ANALYSIS

Objective 1: To find out and compare the perspective of teachers towards the cognitive skills of intellectually disabled children.

Table - 2 The perspective of teachers towards the cognitive skills –- Whole Sample Analysis

Whole Sample	Mean	SD	% of Mean	1/5 of Mean
75	132.33	8.07	64.55	26.47

Interpretation

The data presented in Table 2, reveals that the total sample consists of 75 teachers, with a mean score of 132.33 and a standard deviation of 8.07, indicating a relatively consistent perception among teachers regarding the cognitive skills of intellectually disabled children. The percentage of mean (64.55%) suggests that teachers perceive the cognitive skills of these students at a moderate level rather than high. Additionally, the calculated value of one-fifth of the mean (26.47) further reflects that the overall perception does not reach a very high threshold, but remains within an average range. The low variability (SD = 8.07) indicates that most teachers share similar views, showing uniformity in their perception.

Classification analysis

The perspective of teachers towards the cognitive skills of intellectually disabled children in Bhavila Centre were analyzed, with the overall group showing a mean score of 132.33 and a standard deviation of 8.07. To categorize the teachers based on their levels of perception towards the cognitive skills, the sample was divided into three groups: High perception – teachers with scores above one standard deviation (M + 1SD) from the mean; Intermediate perception – teachers whose scores fall between one standard deviation below the mean (M − 1SD) and one standard deviation above the mean (M + 1SD); and Low perception – teachers with scores below one standard deviation (M − 1SD) from the mean. The frequencies and percentages of teachers in each category were calculated and are presented in Table 3

Table 3 The perspective of teachers towards the cognitive skills – Classification Analysis

S.No	Classification Level	Number	Percentage
1.	Low	20	26.67%
2	Average	37	49.33%
3.	High	18	24.00%
4.	Total	75	100%

Interpretation

The classification analysis in Table 3, shows that out of the total sample of 75 teachers, the majority (49.33%) fall under the average level of perception towards the cognitive skills of intellectually disabled children. A notable proportion of teachers (26.67%) fall under the low perception category, while 24.00% are categorized under high perception. This distribution indicates that most teachers perceive the cognitive abilities of these children at a moderate level, with fewer teachers expressing either highly positive or very low perspective. The relatively balanced distribution between low and high categories, though slightly inclined towards lower perception, suggests variability in teachers' understanding and experience.

Objective 2: To find out the different strategies used by teachers to develop cognitive abilities of intellectually disabled children in Bhavila Centres with respect to the following areas:

- Health and Hygiene
- Conversion of Content
- Teaching and Learning Materials (TLM)
- Positive Reinforcement Methods

Table -4 The perspective of teachers towards the cognitive abilities of intellectually disabled children –Area wise Analysis

S.No	Areas	Mean	% of Mean	S.D	Rank
1	Health and Hygiene	131.74	64.26	8.21	4
2	Conversion of Content	132.56	64.66	7.88	2
3	Teaching and Learning Materials (TLM)	133.10	64.93	8.44	1
4	Positive Reinforcement Methods	131.89	64.34	7.95	3

Interpretation

The area-wise analysis presented in Table 4 reveals that teachers' perceptions of the strategies used to develop the cognitive abilities of students with intellectual disabilities are generally consistent across all four domains, with only minor variations in their mean scores. Among the domains, Teaching and Learning Materials (TLM) received the highest mean score (M = 133.10; 64.93%), securing the first rank, which indicates that teachers consider the effective use of instructional materials to be the most important strategy for enhancing the cognitive abilities of students with intellectual disabilities. Conversion of Content ranked second with a mean score of 132.56 (64.66%), suggesting that teachers recognize the importance of simplifying, modifying, and adapting instructional content to meet the diverse learning needs of these students. Positive Reinforcement Methods obtained a mean score of 131.89 (64.34%), ranking third, reflecting teachers' belief that encouragement and reinforcement play a valuable role in promoting learning and cognitive development. Health and Hygiene ranked fourth with a mean score of 131.74 (64.26%), indicating that although teachers acknowledge its contribution to cognitive development, it received comparatively less emphasis than the other instructional strategies. Furthermore, the relatively low standard deviation values across all four domains suggest a high degree of consistency in teachers' responses, indicating a common understanding regarding the importance of these strategies in fostering the cognitive development of students with intellectual disabilities.

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Objective 3: To find out and compare the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to the following variables

- District (Krishna, Nellore, Srikakulam)
- Educational Qualification (Trained / Untrained)
- Teaching Experience
- Gender

Hypothesis 1: There would be no significant difference in the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to district (Krishna, Nellore, and Srikakulam).

Table 5 The perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children –Districts wise Analysis

Districts	Sample size	Mean	% of Mean	SD	df	SSM	SSW	'F' value
Krishna	25	132.80	64.78	9.01	72	16.99	4807.68	0.13^{NS}
Nellore	25	132.52	64.64	8.04				
Srikakulam	25	131.68	64.23	7.39				

Not Significant at 0.05 level & Table values 1.96 at 0.05 and 2.58 at 0.01 level

Interpretation

The district-wise analysis presented in Table 5, shows that the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children are fairly similar across the three districts—Krishna, Nellore, and Srikakulam. The mean scores for Krishna (132.80) and Nellore (132.52) are slightly higher compared to Srikakulam (131.68), indicating marginal differences in perception levels. The percentage of mean also follows a similar trend, with Krishna (64.78%) ranking highest, followed closely by Nellore (64.64%) and Srikakulam (64.23%). The standard deviation values indicate moderate consistency in responses, with Srikakulam showing slightly lower variability (SD = 7.39) compared to Krishna (SD = 9.01) and Nellore (SD = 8.04). The obtained 'F' value (0.13) is not significant at the 0.05 level, indicating that there is no statistically significant difference among teachers' perspective across the three districts. This suggests a uniform pattern of perception irrespective of geographical location.

Table -6 The perspective of teachers towards the cognitive abilities of intellectually disabled children – ANOVA Analysis

Source of Variation	***SS***	***df***	***MS***	***F***
Between Groups	16.99	2	8.50	0.13
Within Groups	4807.68	72	66.77	
Total	4824.67	74		

Interpretation

The ANOVA analysis presented in Table 6, reveals that the total sum of squares is 4824.67, of which a very small portion (SS = 16.99) is attributed to differences between groups, while a much larger portion (SS = 4807.68) is due to within-group variation. The degrees of freedom for between groups (df = 2) and within groups (df = 72) indicate an adequate distribution of sample data across groups. The mean square value for between groups (MS = 8.50) is considerably lower compared to the within-group mean square (MS = 66.77), suggesting that variability within groups is much higher than variability between groups. The calculated F-value (0.13) is very low and not statistically significant at the 0.05 level, indicating that there is no meaningful difference in teachers' perspective across the groups being compared.

Hypothesis 2: There would be no significant difference in the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to educational qualification (Trained / Untrained).

Table -7 The perspective of teachers towards the cognitive abilities of intellectually disabled children – Educational Qualification Analysis

Educational Qualification	N	Mean	% of Mean	S.D.	SED	't' Value
Trained	38	133.42	65.08	8.12	1.86	1.24^{NS}
Untrained	37	131.20	64.00	7.95		

Not Significant at 0.05 level &
Table values 1.96 at 0.05 and 2.58 at 0.01 level

Interpretation

The ANOVA analysis presented in Table 7, reveals that the total sum of squares is 4824.67, of which a very small portion (SS = 16.99) is attributed to differences between groups, while a much larger portion (SS = 4807.68) is due to within-group variation. The degrees of freedom for between groups (df = 2) and within groups (df = 72) indicate an adequate distribution of sample data across groups. The mean square value for between groups (MS = 8.50) is considerably lower compared to the within-group mean square (MS = 66.77), suggesting that variability within groups is much higher than variability between groups. The calculated F-value (0.13) is very low and not statistically significant at the 0.05 level, indicating that there is no meaningful difference in teachers' perspective across the groups being compared.

Hypothesis 3: There would be no significant difference in the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to teaching experience.

Table -8 The perspective of teachers towards the cognitive abilities of intellectually disabled children –Teaching Experience wise Analysis

Teaching Experience	Sample size	Mean	% of Mean	SD	df	SSM	SSW	'F' value
0–5 Years	9	139.00	67.80	7.28				
6–10 Years	15	133.67	65.20	8.13	72	552.16	4272.51	4.65*
Above 10 Years	51	130.76	63.79	7.65				

**Significant at 0.05 level & Table values 3.12 at 0.05 level*

Interpretation

The data presented in Table 8, indicates that teachers with 0–5 years of experience have the highest mean score (139.00) and percentage of mean (67.80%), followed by teachers with 6–10 years of experience (Mean = 133.67; 65.20%), while teachers with above 10 years of experience show the lowest mean score (130.76; 63.79%). This reveals a gradual decline in perception levels as teaching experience increases. The standard deviation values across groups (7.28, 8.13, and 7.65) indicate moderate consistency in responses within each group. The ANOVA results show a calculated F-value of 4.65, which is significant at the 0.05 level (table value ≈ 3.12), indicating a statistically significant difference among the three groups. Overall, the findings suggest that teaching experience plays a significant role in shaping teachers' perspective, with less experienced teachers exhibiting more positive perspective compared to more experienced teachers.

Hypothesis 4: There would be no significant difference in the perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children with respect to gender.

Table-9 The perspective of teachers towards the cognitive skills and cognitive abilities of intellectually disabled children –Gender wise Analysis

Gender	N	Mean	% of Mean	S.D.	SED	't' Value
Male	35	130.57	63.69	7.48		
Female	40	133.88	65.30	8.35	1.83	1.81^{NS}

Not Significant at 0.05 level &
Table values 1.96 at 0.05 and 2.58 at 0.01 level

Interpretation

The data presented in Table 9, reveals that female teachers (N = 40) have a higher mean score (133.88) and percentage of mean (65.30%) compared to male teachers (N = 35), who have a mean score of 130.57 and a percentage of mean of 63.69%. This indicates that female teachers tend to exhibit slightly more positive perspective towards the cognitive skills and cognitive abilities of intellectually disabled children. The standard deviation values for both groups (Male = 7.48; Female = 8.35) show moderate variability in responses, suggesting a reasonable level of consistency within each group. However, the calculated 't' value (1.81) is not statistically significant at the 0.05 level (table value = 1.96), indicating that the observed difference between male and female teachers is not statistically meaningful.

X. MAJOR FINDINGS

1. The results indicate that teachers perceive the cognitive abilities of intellectually disabled children as moderately developed. This suggests that while basic cognitive skills are present, there is a need for structured teaching strategies to enhance higherorder thinking.
2. The results indicate that teachers predominantly hold a moderate perception of the cognitive skills of intellectually disabled children. The presence of both low and high perception groups reflects differences in teaching experience, exposure, and understanding.
3. The results suggest that teachers consider teaching materials and content adaptation as key factors in improving cognitive skills. The minimal variation across areas reflects a balanced and consistent perception among teachers. However, slightly lower emphasis on reinforcement strategies indicates a need to strengthen behavioral and motivational approaches.
4. The findings indicate that teachers across different districts demonstrate a similar level of perception regarding the cognitive skills and abilities of intellectually disabled children. The non-significant F-value suggests that geographical location does not create any measurable variation in teachers' perspective. This uniformity reflects the presence of common training backgrounds, shared teaching practices, and standardized educational approaches across the districts.
5. The non-significant F-value indicates that there is no statistically significant difference among the groups studied. This suggests that teachers share similar perspective regarding the cognitive skills and abilities of intellectually disabled children. The high within-group variation compared to between-group variation reflects consistency in overall perception patterns.
6. The non-significant F-value indicates that there is no statistically significant difference between trained and untrained teachers in their perspective of the cognitive skills and abilities of intellectually disabled children.

7. The significant F-value indicates that teaching experience has a meaningful influence on teachers' perspective. Teachers with lesser experience tend to show higher perception levels compared to more experienced teachers. This suggests that attitudes and perspective may change over time due to experience and classroom realities.
8. The findings indicate that male and female teachers exhibit comparable perspective regarding the cognitive skills and abilities of intellectually disabled children. Although female teachers obtained slightly higher mean scores, the difference is not statistically significant, suggesting that this variation is marginal and not meaningful. This implies that gender does not play a decisive role in shaping teachers' perspective.

XI. DISCUSSION OF MAJOR FINDINGS

The first finding indicates that teachers perceive the cognitive abilities of students with intellectual disabilities as moderately developed. This suggests that while students possess basic cognitive skills, there is considerable scope for further improvement through structured and systematic teaching strategies. This finding highlights the importance of adopting individualized instruction, task analysis, and scaffolded learning approaches to enhance higher-order thinking skills. It also reflects that teachers are aware of students' current abilities but recognize the need for more focused interventions to promote cognitive growth.

The second finding reveals that teachers predominantly hold a moderate perception of the cognitive skills of students with intellectual disabilities, with variations ranging from low to high levels. This variation may be attributed to differences in teachers' qualifications, experience, training, and exposure to special education practices. Teachers with better training and experience may have a more accurate understanding of students' abilities, while others may underestimate or overestimate them. This finding underscores the need for uniform professional development programs to ensure consistency in teachers' perceptions and practices.

The third finding emphasizes that teachers consider teaching materials and content adaptation as crucial factors in improving cognitive skills. The relatively balanced responses across different areas indicate that teachers maintain a consistent approach in their instructional practices. However, the comparatively lower emphasis on reinforcement strategies suggests that behavioral and motivational techniques are not being fully utilized. This highlights the need to strengthen the use of positive reinforcement, feedback, and reward systems to enhance student engagement and learning outcomes.

The fourth finding shows that teachers across different districts demonstrate similar perceptions regarding the cognitive abilities of students with intellectual disabilities. The absence of significant differences indicates that geographical location does not influence teachers' perspectives. This uniformity may be due to standardized training programs, similar institutional frameworks, and shared teaching practices across Bhavita Centers. It suggests that educational policies and training initiatives are being implemented consistently across regions.

The fifth finding also indicates no significant differences among the groups studied, suggesting that teachers share a common perspective regarding students' cognitive abilities. The higher within-group variation compared to between-group variation reflects that individual differences exist within groups, but overall perceptions remain consistent. This consistency is a positive indication that teachers have a generally unified understanding of intellectual disabilities, which is essential for maintaining standard teaching practices.

The sixth finding reveals that there is no statistically significant difference between trained and untrained teachers in their perceptions of students' cognitive skills. This is an important observation, as it suggests that formal training alone may not be sufficient to influence teachers' perspectives. It may also indicate that untrained teachers gain practical knowledge through experience or informal learning. However, this finding points to the need for more effective and practical training programs that can create a meaningful impact on teachers' understanding and instructional approaches.

The seventh finding highlights that teaching experience has a significant influence on teachers' perspectives. Interestingly, less experienced teachers tend to show higher perception levels compared to more experienced teachers. This may be because newer teachers are more enthusiastic, updated with recent training, and open to innovative teaching methods. In contrast, experienced teachers may develop fixed perceptions based on long-term classroom experiences. This finding suggests the importance of continuous professional development and refresher training programs to keep experienced teachers updated and motivated.

The eighth finding indicates that male and female teachers exhibit similar perspectives regarding the cognitive skills of students with intellectual disabilities. Although female teachers have slightly higher mean scores, the difference is not statistically significant. This suggests that gender does not play a major role in shaping teachers' perceptions. The finding reflects that both male and female teachers are equally capable of understanding and addressing the needs of students with intellectual disabilities, which is a positive sign for gender equity in the teaching profession.

XII. EDUCATIONAL IMPLICATIONS OF THE STUDY

1. The moderate level of cognitive skills among students with intellectual disabilities indicates the need for structured and systematic teaching strategies, such as individualized instruction and task analysis, to enhance higher-order thinking abilities.
2. The variation in teachers' perceptions highlights the importance of continuous professional development programs to ensure uniform understanding and effective teaching practices among teachers.
3. Since teaching materials and content adaptation play a crucial role, there is a need to develop and provide appropriate, customized, and activity-based teaching-learning materials in Bhavita Centers.
4. The comparatively lower emphasis on reinforcement strategies suggests that teachers should be trained to use behavioral and motivational techniques, such as positive reinforcement, rewards, and feedback, to improve student engagement.
5. The uniformity in teachers' perceptions across districts indicates that standardized training modules and teaching practices should be maintained and further strengthened across all Bhavita Centers.
6. As no significant differences were found among various groups of teachers, it implies the need to promote collaborative learning and sharing of best practices among teachers to enhance teaching effectiveness.
7. The absence of significant differences between trained and untrained teachers suggests that teacher training programs should be more practical, skill-oriented, and classroom-focused to create a meaningful impact.
8. The significant influence of teaching experience indicates the necessity for regular refresher courses, workshops, and in-service training programs to update experienced teachers with modern teaching strategies.

XIII. CONCLUSION

The present study concludes that teachers in Bhavita Centers in Coastal districts of Andhra Pradesh generally possess a moderate and consistent perception of the cognitive abilities of students with intellectual disabilities, and they employ a range of teaching strategies to support their learning. The findings indicate that while instructional practices such as content adaptation and use of teaching materials are effectively implemented, there is a need to strengthen reinforcement techniques and adopt more structured, student-centered approaches. The study also reveals that factors such as gender, training, and geographical location do not significantly influence teachers' perspectives, whereas teaching experience plays a meaningful role. Overall, the results highlight the importance of continuous professional development, availability of appropriate resources, and the adoption of innovative teaching strategies to enhance the cognitive and adaptive development of students with intellectual disabilities.

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