

Effect of bibliotherapy on the cognitive reasoning of children with mild intellectual disorder in public special-need schools in Ogun State

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Abstract

Cognitive reasoning (CR) is a critical aspect of human intelligence, encompassing the mental processes utilised for thinking, learning, and comprehending, which are essential for academic achievement. This article explores the effects of bibliotherapy on cognitive reasoning among CWMID in public special-need schools in Ogun State, Nigeria. The study adopts a pretest, posttest quasi-experimental design. Purposive sampling technique was adopted, and all 22 educable children with mild intellectual disorder, aged 6-16 years, from two special-need schools in Ogun State participated in the study. Analysis of covariance was used to analyse the data collected. The study was able to establish that bibliotherapy improved cognitive reasoning among children with mild intellectual disorder in the schools for children with special needs, Ogun State, Nigeria. The treatment strategy is therefore recommended to be adopted for improving cognitive reasoning among children with mild intellectual disorder.

Keywords: Cognitive reasoning, bibliotherapy, intellectual disorder, special-needs education

Introduction

Education is fundamental to human growth, enhancing intellectual, social, and emotional capabilities. It aims to develop analytical skills necessary for logical thinking, problem-solving, decision-making, and overall intellectual development. Education is a fundamental right of every child, as emphasised by Education for All in the Sustainable Development Goal 4 (UNDP, 2017). The global adoption of the United Nations Convention on the Rights of every Child (UNCRC) in 1989 underscores the commitment to educating all children, regardless of their circumstances or disability. This obligation, outlined in the UNCRC, aligns with achieving SDG 4, Agenda 2063.

For children with special needs, education is a government-mandated priority to meet these global goals. Regular children find education more accessible due to their regular cognitive abilities (Shukshina, Neyasova, and Serikova, 2014). However, the situation is different for children with special needs, as they require special therapy to be effectively educated, particularly in a formal setting. Generally, everything learned during education is processed and stored in the brain. This means that whatever is taught is understood and comprehended through the cognitive reasoning ability.

According to Imlahi (2015), cognitive reasoning is the ability to understand, plan, think, talk, reason, comprehend, remember, and relate to various aspects of an individual's life. It is a fundamental aspect of human intelligence that involves using logical, critical thinking, and problem-solving skills to make sense of information, form judgments, and arrive at conclusions. It encompasses a range of skills including perception, attention, memory, comprehension, analysis, and evaluation. Cognitive reasoning, involving processes such as perception, attention, memory, understanding, analysis, assessment, and problem-solving, is a learned skill essential for academic success.

Children with intellectual disorder often face challenges in cognitive reasoning, resulting in difficulties in problem-solving, critical thinking, and abstract reasoning. These children, particularly those with mild intellectual disorder, exhibit cognitive reasoning obstacles that impact their educational outcomes. Given the global advocacy for inclusive education, it is crucial to explore effective interventions that can support and enhance the cognitive reasoning ability of these children.

Cognitive reasoning encompasses various mental processes, including perception, attention, memory, and problem-solving, essential for academic achievement and daily functioning. Children with mild intellectual disorder (CWMID) often experience challenges in these areas, leading to difficulties in learning and adapting to their environment. Interestingly, with the appropriate and well-implemented educational supports, children with mild intellectual disorder could be taught, particularly if efforts are made to enhance their cognitive reasoning (Botsas 2017; Mehdizadeh and Khosravi 2019).

In Nigeria, the prevalence of intellectual disorder necessitates effective interventions to enhance cognitive reasoning in affected children. Therefore, it is crucial to ensure the broad dissemination of these educational supports, which hinges on demonstrating their impact on intellectual ability. Educable children with mild intellectual disorder have the potential to integrate into the society if they receive effective special support or treatment that improves their cognitive reasoning. This article examines the role of bibliotherapy in improving cognitive reasoning among children with mild intellectual disorder, highlighting its benefits.

Bibliotherapy is an intervention that uses literature to support mental health and cognitive development. It involves the guided reading of specific texts aimed at helping individuals understand and cope with their experiences. For children with intellectual disorder (Setiawam et al. 2023), bibliotherapy could serve as a powerful tool to increase cognitive reasoning by providing structured and relatable content that stimulates cognitive processes. Bibliotherapy, derived from the Greek words "biblio" (book) and "therapeia" (healing), involves using literature texts such as

novels, stories, and poems to promote emotional well-being and personal growth. It is a process where one's love for reading is shared to effect positive emotional change and encourage personality development. In this article, bibliotherapy was applied to assess its effectiveness on the cognitive reasoning of children with mild intellectual disorder (CWMID).

The bibliotherapy treatment aimed to help these children understand that they are not alone in their experiences, and that some others have faced and overcome similar challenges. Developmental bibliotherapy, which can be conducted individually or in groups with the aid of a librarian, has proved to be particularly suitable for personality development, according to Adeyeye and Oyewusi (2017). The key to successful bibliotherapy lies in selecting books with characters and situations that resonate with the reader, allowing them to relate the story to their own life, experience catharsis, and gain new insights with the help of a bibliotherapist.

Several factors were considered when selecting the book for bibliotherapy treatment. These included the comfort level of the children with mild intellectual disorder with the text, its relevance to the issue being addressed, the children's cognitive reasoning ability, age, language, and vocabulary. It is essential for the therapist to be thoroughly familiar with the chosen text, having read it multiple times, to ensure it is the right match for the client's needs. Providing the wrong book at the wrong time can exacerbate the issue rather than help resolve it. Therefore, the therapist must have a deep understanding of both the book and the specific goal of the bibliotherapy session.

Statement of the problem

Children with mild intellectual disorder (CWMID) exhibit significantly lower cognitive reasoning ability compared to their peers, affecting their reasoning, memory, attention span, behavior, and adaptive skills. This deficiency is often linked to brain abnormalities caused by genetic or developmental factors. Globally, the prevalence of intellectual disorder suggests that without innovative educational strategies, up to 90 million children may be deprived of quality education. Improving the cognitive reasoning of children with mild intellectual disorder (CWMID) is crucial for their educational success. This study therefore investigates the effect of bibliotherapy on the cognitive reasoning of CWMID in public special-need schools in Ogun State while examining the moderating effects of gender and parental support. The goal is to determine how this treatment can enhance cognitive reasoning for this category of children.

Objectives of the Study

The objectives of the study include to determine:

1. the main effect of bibliotherapy on the cognitive reasoning of children with mild intellectual disorder in public special-need schools in Ogun State, Nigeria;
2. main effect of gender on the cognitive reasoning (CR) of CWMID in public special-need schools in Ogun State, Nigeria;
3. main effect of parental support on the cognitive reasoning (CR) of CWMID in public special-need schools in Ogun State, Nigeria;

Hypotheses

The following null hypotheses were tested in the study at 0.05 level of significance:

H₀₁: There is no significant main effect of treatment (bibliotherapy) on the cognitive reasoning of children with mild intellectual disorder in public special-need schools, Ogun State, Nigeria.

H0₂ There is no significant main effect of gender on the cognitive reasoning of children with mild intellectual disorder in public special-need schools, Ogun State, Nigeria.

H0₃ There is no significant main effect of parental support on the cognitive reasoning of children with mild intellectual disorder in public special-need schools, Ogun State, Nigeria.

The Concept of Bibliotherapy

The practice of using books for therapeutic purposes, known by various names including bibliotherapy, literatherapy, and reading therapy, has a long history. This concept focuses on addressing mental health concerns and psychological issues through the use of literature. Bibliotherapy originated in the 1930s, when librarians and counselors collaborated to create lists of materials specifically written and designed to assist individuals in therapeutic processes (McLaine, 2014). This joint effort led to the recommendation of certain literature texts for people facing challenges, marking an early acknowledgment of the therapeutic benefits of reading. Bibliotherapy has been used as a method of counselling in the classroom by special educators to support children's social and emotional needs (Long, Morse, Fecser, and Newman, 2007).

Bibliotherapy involves the use of literature to support mental and emotional health (Betzael and Shechtman, 2010). It could be particularly effective for CWMID as it combines reading with therapeutic discussions, allowing them to connect with characters, stories, and themes that reflect their own experiences. By engaging with carefully selected texts, children can develop critical thinking and problem-solving skills in a supportive and structured environment.

Research has shown that bibliotherapy can positively impact situations by providing relatable scenarios that encourage reflective thinking (Adeyeye and Oyewusi, 2017). Studies conducted in various educational settings have demonstrated that bibliotherapy helped regular children in improving their comprehension, memory, and analytical skills. Furthermore, bibliotherapy is envisaged to foster emotional intelligence, enhancing children's ability to understand and manage their emotions, which is crucial for effective cognitive reasoning.

Cognitive Reasoning and Intellectual Disorder

Children with intellectual disorder face significant challenges in developing cognitive, motor, auditory, language, psychosocial, moral judgment, and daily living skills, as highlighted by Pratt and Greydanus (2007). Studies indicate that over 80% of children with intellectual disorder experience linguistic difficulties, necessitating specialised care. For instance, Gupta (2019) found that CWMID who speak Malayalam struggle with syntax and other language components, leading to emotional issues and feelings of inferiority due to repeated failures. These challenges are exacerbated when teachers and parents compare their milestones with those of typically developing peers.

Olatoye and Oyundoyin (2007) conducted research in Oyo State, Nigeria, on cognitive reasoning as a predictor of creativity among secondary school students. Their study revealed that cognitive reasoning accounted for 8% of the variance in creativity, specifically influencing aspects like fluency, originality, adaptability, and motivation. They recommended considering cognitive reasoning when selecting students for tasks requiring creativity. This suggests that enhancing cognitive reasoning in CWMID could improve their creative abilities, positively impacting their overall condition.

CWMID are often physically underdeveloped compared to regular children, with poor muscular coordination, slower reaction times, and sometimes physical defects, including issues with vision, speech, or other areas. Their cognitive reasoning abilities are particularly deficient, limiting their abstract thinking and ability to connect experiences. Despite these challenges, intellectual disorder is not influenced by age, gender, ethnicity, religion, or socioeconomic status, affecting children and adults across all demographics.

Biasini, Grupe, Huffman, and Bray (1999) noted that intellectual disorders are chronic conditions that severely impact individuals and place significant stress on families. Gottfredson (1997) also emphasised the broad applicability of general cognitive reasoning ability, showing that higher cognitive abilities correlate with better life outcomes, particularly in occupational success. These findings collectively underscore the importance of targeted interventions to enhance cognitive reasoning in children with intellectual disorder, which could lead to improvements in both their creative capacities and overall quality of life.

Bibliotherapy and Cognitive Reasoning

Through the structured and intentional use of literature, children are encouraged to engage with texts that challenge their thinking and reasoning skills. This process may not only be helpful in developing cognitive ability but also in enhancing emotional and social understanding, which are crucial for holistic development. The selection of literature for bibliotherapy aimed at children with mild intellectual disorder should be engaging and captivating. Considering their short attention span, the book should be concise and easy to understand. It should focus on fostering hope and support while taking into account the unique nature of these children and their cognitive reasoning (CR) levels. The book's theme should align with the specific needs of the children and address cognitive reasoning, with realistic characters that the children can relate to and empathize with. These specifications are crucial to achieving the goals of bibliotherapy.

In an empirical study by Laba-Hornecka (2017), puppets were used in bibliotherapy sessions to shape adaptive behavior in students with mild intellectual disorder. The study employed a parallel groups methodology with pre-test and post-test measures, using the Barbara Markowska Student Behaviour Chart. The results showed positive changes in inhibition and antisocial behavior in the experimental group after the intensive program, with comparable motivation and sociability levels to the control group in the pre-test stage.

Nursalam et al. (2018) conducted a quasi-experimental study on the impact of bibliotherapy on self-concept in children with intellectual disorder. Using the Robson Self-Concept Questionnaires and the Manova test, the study found that bibliotherapy positively influenced the self-esteem and overall self-concept of the children, helping them engage in imaginative thinking aligned with their circumstances. Mehdizadeh and Khosravi (2019) explored how bibliotherapy impacts children with intellectual disorder through a grounded theory approach. The study involved a specialised bibliotherapy intervention over three years, emphasising the importance of identifying the specific needs and behaviors of these children. The intervention led to improvements in the skills necessary for adjusting to the disorder.

Lenkowsky et al. (1987) assessed the impact of bibliotherapy on self-concept in students with learning disorders and emotional disturbances, using the Piers-Harris Children's Self-Concept

Scale. Although there was a change in self-concept in the bibliotherapy groups, the results were not statistically significant. Similarly, Virzi (1980) examined the effect of bibliotherapy on the reading attitudes of children with mild intellectual disorder and found no significant difference post-intervention. Both studies highlight the potential but also the limitations of bibliotherapy in addressing cognitive and emotional challenges in children.

Gender and intellectual disorder

The unique challenges faced by individual gender with intellectual disorder cannot be ruled out. According to Morris (1993), societal notions of dependence and independence are tightly intertwined with gender expectations, with men expected to be independent and women dependent. This creates a complex dynamic where individuals with disabilities experience compounded discrimination based on both gender and disability. Collins and Valentine (2003) and Wilson et al. (2010) highlighted the struggles of women and girls with intellectual disorder, arguing that they face a "double disadvantage" due to their gender and disability. This is evident in their increased vulnerability to economic hardships, victimisation, abuse, and exploitation, as noted by Mitchell (2011) and Frohmader (2010). Statistics show that a significant majority of women with intellectual disorder are sexually assaulted or exploited by the age of 18 (MacDonald, 2008).

Moreover, women with intellectual disorder often lack autonomy in decisions regarding their sexuality and fertility, with societal stereotypes further marginalising them (McCarthy, 2011; Chenoweth, 1996). Those who choose to have children face additional psychological and social barriers, further devaluing their role in a gendered society (Collins & Valentine, 2003). On the other hand, there is a noticeable gap in research on the experiences of men with intellectual disorder. Morris (1993) and Wilson et al. (2010) suggest that societal constructs of masculinity, which emphasize strength, power, and autonomy, can oppress men with disabilities, who are often seen as failing to meet these standards. Research tends to focus more on behavioral issues in men rather than their overall health and well-being.

Parental Support for CWMID

Parental influence extends across various aspects of a child's life, including education. For children with disabilities, parental support can be even more critical, especially if the family is socially affluent, enabling them to afford necessary rehabilitation services and advocate effectively within educational institutions (Patel, Singh and White 2024}. Gonzalez, Martinez and Harris (2022) emphasised that the importance of parental support is even greater for children with disabilities than for those without. Onyeka and Musa (2023) highlighted the importance of parental involvement in fostering reading habits among children. The impact of parental support goes beyond academics, affecting all facets of a child's life.

Ekundayo, Adeola and Oladimeji (2023) found that parental support and monitoring are significant predictors of adolescent outcomes, such as reducing delinquency and other problematic behaviors. Their study, involving 699 adolescents and their families, demonstrated the influence of parenting practices on adolescent development. Parenting a child with intellectual disorder often comes as an unexpected responsibility, which can initially cause parents to experience shock and anger. To fully support their child's development, parents need specific guidance and assistance. This includes alleviating stress, maintaining family stability, managing maladaptive behaviors, finding suitable placements, and planning for the child's future. Parents also need information on their

child's condition, guidance on educational and vocational rehabilitation, emotional support, and assistance with societal acceptance of their child with special needs. Egunsola (2014) noted that the family environment significantly impacts a child's motivation and success in school. Children with mild intellectual disorder who receive love and affection from their parents are more likely to cope better with their education. Conversely, negative parental attitudes could hinder their involvement in their child's well-being and academic achievement.

Methodology

The study was conducted in two public special-need schools in Ogun State, Nigeria, involving 22 children with mild intellectual disorder aged 6-16. The children were divided into two groups: the bibliotherapy group and the control group. Over six weeks (bi-weekly sessions), the bibliotherapy group participated in sessions where the recommended text was read and discussed with the participants to stimulate cognitive processes. Data were collected using the Cognitive Reasoning Assessment Test (CRAT) and analyzed using descriptive statistics and analysis of covariance.

The study employs a pretest-posttest control group quasi-experimental design. Participants are chosen through purposive sampling from two public special-need schools in Ogun State, Nigeria. The study consists of two groups: the bibliotherapy group and the control group. The bibliotherapy group participated in a pretest, followed by a six weeks (bi-weekly) treatment intervention, after which they participated in a posttest. On the other hand, the control group, although participated in both the pretest and posttest, received a placebo (non-therapeutic) treatment.

The study involves 22 children with mild intellectual disorder, aged 6-16 years, from two special-need schools in Ogun State namely: School for children with special-needs, Sagamu and School for children with special-needs, Ijebu-Ode. The participants were divided into two groups: bibliotherapy (11), and control (11). The gender distribution is 54.5% males, Instructional guide for bibliotherapy (**Thank you Mr. Falker by Patricia Pollacco**) is an 18 paged non-fiction text which tells a story of a lady who was living with a learning disorder when she was young, and how she was able to get over the condition because of one of her elementary school teachers (named Mr. Falker) who showed and maintained interest in her condition, and followed up on her by giving her extra teaching aids.

Cognitive Reasoning Assessment Test (CRAT)

The Cognitive Reasoning Assessment Test (CRAT) instrument was developed by the researchers. It was used to assess the cognitive reasoning ability and the level of parental support for the CWMID. It was designed in a way to assess their memory level, comprehension, and logical reasoning. Furthermore, it is also designed to assess the extent of support each received from their parents. The instrument contained three sections A, B and C.

Section A contained the demographic information of the respondents such as name of school, class, age and gender.

Section B consisted ten multiple choice objective questions. The items represent three categories of cognitive domains which are knowledge, comprehension and application. The 10 test items were based on the identified indicators (Memory, Comprehension and Logical reasoning), questions were formulated to represent each indicator.

Section C titled the Parental Support Scale, was developed by the researcher. This scale consists of 10 items, each reflecting one of five key indicators: acceptance, understanding, intimacy,

encouragement, and monitoring. Each indicator is represented by two items on the scale. Responses are measured using a four-point Likert Scale, with options ranging from Strongly Agree (SA=4) to Strongly Disagree (SD=1).

Sample size for the study

All the twenty-two (22) educable children with mild intellectual disorder, aged 6-16 years, from the two selected special-need schools in Ogun State participated in the study

Bibliotherapy package

The bibliotherapy package included an internationally-authored illustrated non-fiction titled “Thank you, Mr. Falker” by Patricia Pollacco, designed to enhance the critical thinking skills and cognitive reasoning (CR) of children with mild intellectual disorder in Ogun State. The book was chosen for its relevance to intellectual disorder. Considering the short attention span of CWMID, the book is concise and uses simple English vocabulary with bold fonts to maintain attention and facilitate understanding and comprehension. During the six bi-weekly sessions, the researcher read aloud and explained the content to the participants.

Conventional Reading Package (Control Group)

The control group followed the usual classroom reading method, which is non-therapeutic in the course of the six bi-weekly intervention period. The non-fiction text “Thank you Mr. Falker” by Patricia Pollacco was also adopted for this group. This approach was implemented to keep the control group engaged and prevent distractions, even though it did not involve any therapeutic elements.

Summary of BIBLIOTHERAPY Sessions:

Week 1a: Introduction and familiarisation of the facilitator (researcher) with the participants and introduction of bibliotherapy treatment, administration of the pretest. Introduction of the book “Thank you Mr. Falker” authored by Patricia Pollacco to the pupils with mild intellectual disorder.

Week 1b: Group reading, explanation, discussion, question and answers on pages 1 and 2.

Week 2a: Group reading, explanation, discussion, question and answers on pages 3 and 4.

Week 2b: Group reading, explanation discussion, question and answers on pages 5 and 6.

Week 3a: Group reading, explanation discussion, question and answers on pages 7 and 8.

Week 3b: Group reading, explanation discussion, question and answers on pages 9 and 10.

Week 4a: Group reading, explanation discussion, question and answers on pages 11 and 12

Week 4b: Group reading, explanation, discussion, question and answers on pages 13 and 14.

Week 5a: Group reading, explanation discussion, question and answers on pages 15 and 16.

Week 5b: Group reading, explanation discussion, question and answers on pages 17 and 18.

Week 6a: Group review, discussion, question and answers on all pages

Week 6b: Assessment and evaluation of the participants, administration of posttest, and appreciation of participants was done by the researcher.

Results

The findings revealed a significant improvement in cognitive reasoning among children in the bibliotherapy group compared to the control group. The posttest mean score for the bibliotherapy group was 8.48, indicating enhanced cognitive skills. The study also found that bibliotherapy was more effective for male participants.

Hypothesis one: Main Effect of bibliotherapy treatment

The analysis shows a significant main effect of bibliotherapy on cognitive reasoning among children with mild intellectual disorder ($F = 21.80$, Partial $\eta^2 = 0.62$). Participants in the bibliotherapy group have the highest posttest mean score (8.48) and the control group (6.51). This suggests that the treatment is potent in the treatment of cognitive reasoning for CWMID. As a result, hypothesis one is rejected.

Table showing the estimated marginal means of bibliotherapy treatment on the Cognitive Reasoning of kids with mild ID attending public special-needs schools.

Estimates

Dependent Variable: Post_Reasoning

Groups	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Bibliotherapy	8.478 ^a	.339	7.783	9.173
Control group	6.510 ^{a,b}	.305	5.884	7.135

a. Covariates appearing in the model are evaluated at the following values: Pre_Reasoning = 6.8947.

b. Based on modified population marginal mean.

Table showing Bonferonni Post Hoc Test showing multiple pair-wise analyses of the treatment groups

Pairwise Comparisons

Dependent Variable: Post_Reasoning

(I) group	Treatment (J) group	Mean Difference (I-J)	Std. Error	Sig. ^d	95% Confidence Interval for Difference ^d	
					Lower Bound	Upper Bound
Bibliotherapy						
	Control group	1.968 ^{*,b}	.449	.000	1.046	2.890
Control group						
	Bibliotherapy	-1.968 ^{*,c}	.449	.000	-2.890	-1.046

Using calculated marginal means

*. At the 0.05 level, the mean difference is significant.

b. An estimate of the modified population marginal mean (J).

c. An adjusted estimate of the population's marginal mean (I).

d. Adjusting for multiple comparisons: Least Significant Difference (which means no modifications).

Hypothesis two: Gender and Cognitive Reasoning

There is a significant main effect of gender on cognitive reasoning of CWMID ($F = 5.44$, Partial $\eta^2 = 0.17$), with male participants outperforming females. The mean score for males is 9.04, while females have a mean score of 8.17. The male participants performed better in the posttest scores

after receiving the treatment. This suggests that the male participants were more disposed to the treatment. As a result, hypothesis two is rejected.

Table showing Posttest Cognitive Reasoning Estimated Marginal Means According to Gender Estimates

Dependent Variable: Post_Reasoning

GENDE R	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
MALE	9.043 ^{a,b}	.231	8.569	9.517
FEMALE	8.166 ^{a,b}	.295	7.561	8.770

a. Covariates appearing in the model are evaluated at the following values: Pre_Reasoning = 6.8947.

b. Based on modified population marginal mean.

Hypothesis three: Parental support and Cognitive Reasoning

Parental support had no significant main effect on the cognitive reasoning of CWMID in public special-need schools ($F = 0.018$; $p > .05$). Although, many of the children with mild intellectual disorder received a high level of parental support, it did not influence their performances in the pretest and posttest scores because CWMID who had low parental support performed as well as those who did not in the posttest results. As a result, hypothesis three is not rejected, meaning that parental support had no significant effect on the cognitive reasoning of CWMID in the study.

Discussion

This study evaluated the effectiveness of bibliotherapy in improving cognitive reasoning and well-being among children with mild intellectual disorders (CWMID). The findings highlight bibliotherapy's benefits, particularly in enhancing cognitive reasoning, emotional regulation, and social skills. Afreen & Kumar (2023) emphasized its role in fostering critical thinking and problem-solving, while Gonzalez et al. (2022) noted its value in emotional management and reducing isolation. Ekundayo et al. (2023) found that parental involvement enhances its effectiveness, and its adaptability to cultural contexts, such as in Ogun State, Nigeria, further supports its relevance.

However, limitations exist. Bibliotherapy is less effective for severe intellectual disabilities, as noted by Johnson & Taylor (2023). Factors like facilitator expertise, cultural relevance of materials, and institutional support significantly impact its success (Okonkwo & Adeyemi, 2022). A multimodal approach, integrating bibliotherapy with other therapies, may yield better outcomes (Patel et al., 2024). Critics, including Onyeka & Musa (2023), stress the need for culturally specific materials to maximize its impact.

Overall, bibliotherapy is a valuable intervention, but its success depends on various factors. Future research should focus on creating culturally tailored materials and integrating bibliotherapy with complementary therapies.

Conclusion

Bibliotherapy offers a promising intervention for enhancing cognitive reasoning in children with mild intellectual disorder. Its implementation in special-needs education can provide significant cognitive and emotional benefits, supporting this category of children in achieving their full potential. Educators and parents should consider incorporating bibliotherapy into educational programs to foster cognitive development and improve the quality of life for children with mild intellectual disorder.

Bibliotherapy serves as a valuable intervention for enhancing cognitive reasoning in children with mild intellectual disorder. It offers a structured and relatable approach to learning, which can significantly improve cognitive abilities. The study highlights the need for integrating bibliotherapy into special education curricula to support the cognitive development of children with intellectual disorder.

Gender was able to moderate the effects of the results because the male participants performed better than their female counterparts

Recommendations

Based on the findings of the current study, the following are hereby recommended:

1. Schools should incorporate bibliotherapy into their curricula to provide structured and therapeutic reading sessions.
2. Teachers/educators should receive training on selecting appropriate texts and facilitating bibliotherapy sessions effectively.
3. Authors should look into writing of more literature texts that would be appropriate for bibliotherapy treatment for children with mild intellectual disorder

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