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Research Article

A Comparative Study On Emotional Intelligence, Aggression, And Anxiety Among Disabled Practicing Yogic Exercises

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ABSTRACT

This study examines the psychological profiles specifically Emotional Intelligence , Aggression, and Anxiety of 50 disabled school students (25 boys and 25 girls) aged 13–18, all of whom engaged in regular yogic practices as part of their inclusive school curriculum. Using a quantitative comparative design, data were collected through standardized psychological assessments and analyzed using descriptive statistics, independent samples t-tests, and Structural Equation Modeling (SEM). Results revealed that while Emotional Intelligence scores were higher among girls, the difference was not statistically significant. However, boys exhibited significantly higher levels of Aggression and Anxiety ($p < 0.01$). Correlation analysis showed strong negative associations between Emotional Intelligence and both Aggression and Anxiety. SEM confirmed that higher Emotional Intelligence significantly predicted lower aggression and anxiety, and the model demonstrated good overall fit. These findings support the hypothesis that consistent yoga practice may enhance emotional regulation and reduce behavioral issues in disabled adolescents, offering valuable implications for special education programs and mental health interventions.

Key Words: Emotional Intelligence, Aggression, Anxiety ,Disability, SEM Analysis

INTRODUCTION

The psychological well-being of children with disabilities has garnered growing attention in contemporary educational and mental health research. As educational paradigms shift towards more inclusive practices, it becomes increasingly vital to understand the emotional and behavioral dimensions that influence the academic and social development of students with disabilities. In particular, the adolescent stage characterized by rapid cognitive, emotional, and social changes brings about unique psychological challenges. For disabled students, these challenges are often magnified by physical, sensory, or cognitive limitations, making targeted psychological support a critical component of inclusive education.

Among the various psychological constructs that affect adolescent development, Emotional Intelligence, Aggression, and Anxiety stand out as particularly significant. Emotional Intelligence, conceptualized by Goleman (1995), refers to the ability to perceive, understand, regulate, and utilize emotions in oneself and in interpersonal contexts. For children with disabilities, who may face difficulties in verbal expression, social interaction, and environmental adaptation, high emotional intelligence can serve as a protective factor. It facilitates improved peer relationships, greater resilience, and enhanced coping strategies when facing academic or social adversities. Supporting this, Petrides et al. (2004) found that students with higher EI demonstrated improved classroom behavior, social inclusion, and academic engagement. For disabled adolescents, particularly those with communication difficulties, even modest gains in Emotional Intelligence potentially nurtured through yoga can significantly enhance their emotional resilience and adaptive functioning in school environments.

Conversely, Aggression and Anxiety are frequently reported emotional challenges among children in special education contexts. A host of contributing factors ranging from limited communication abilities and poor academic performance to social isolation and low self-worth can lead to behavioral issues such as impulsive aggression or emotional conditions like generalized anxiety. Research by Sukhodolsky et al. (2004) confirms that boys with developmental disabilities are especially prone to such externalizing and internalizing

symptoms. Emerson (2003) similarly noted the higher prevalence of emotional disorders among boys with intellectual disabilities, emphasizing the urgency of gender-sensitive interventions within inclusive education systems. These patterns suggest that male students may require more intensive support for emotional regulation and stress management.

Amid these challenges, yogic practices have gained recognition as a promising, cost-effective, and non-pharmacological intervention for enhancing the psychological well-being of children with disabilities. Yoga, with its ancient roots in Indian philosophy, encompasses a holistic approach involving physical postures (asanas), breathing techniques (pranayama), and meditation (dhyana). Empirical studies have increasingly validated its role in improving emotional regulation, attentional control, and stress management. For instance, Telles et al. (1993) and Bhushan & Sinha (2001) documented significant improvements in emotional stability and self-regulation through regular yoga practice in children. Kauts & Sharma (2009) further demonstrated that yoga participation reduced academic stress and enhanced psychological well-being in school students. These findings align closely with the premise that yoga-based programs can serve as powerful tools for emotional development, particularly among children with disabilities.

Emotional Intelligence has emerged as a significant predictor of behavioral and emotional outcomes. Mayer, Salovey, and Caruso (2000) argued that Emotional Intelligence plays a crucial role in emotional adaptation and self-control, enabling individuals to manage emotional impulses more effectively. This perspective supports findings that higher Emotional Intelligence is inversely associated with aggression and anxiety. Similarly, Woodyard (2011) emphasized the therapeutic potential of yoga in improving emotional stability, reducing stress, and enhancing overall mental health. These effects suggest that enhancing Emotional Intelligence through yoga may trigger a positive chain reaction that lowers both aggression and anxiety in adolescents.

Gender-specific emotional patterns have been highlighted in prior studies. Guralnick (2005) observed that boys with disabilities often encounter compounded emotional stress due to social pressure, delayed emotional maturity, and communication barriers. These gender differences underscore the need to design emotional wellness programs such as yoga and mindfulness-based training that cater to the specific psychological needs of boys and girls within inclusive educational frameworks.

Given this context, the present study seeks to systematically examine the psychological profiles of school-going children with disabilities who regularly engage in yogic practices. The study will particularly focus on three critical psychological variables: Emotional Intelligence, Aggression, and Anxiety. Furthermore, it aims to analyze gender-based differences in these variables, acknowledging the role that gender may play in emotional development and behavioral expression among disabled youth. By integrating both psychological assessment and gender analysis, this research aspires to contribute to the ongoing discourse on evidence-based emotional interventions within inclusive educational frameworks.

Ultimately, the findings are expected to offer practical insights for educators, counselors, and policymakers seeking to enhance the emotional and behavioral competencies of children with disabilities. By highlighting the role of yoga as an effective, scalable, and inclusive intervention, this study supports the development of holistic educational practices that foster resilience, emotional maturity, and well-being in vulnerable student populations.

METHODOLOGY

To explore the psychological impact of yogic practices on disabled school students, this study adopted a quantitative, comparative research design. The methodology was structured to ensure the collection of reliable and meaningful data on key psychological variables Emotional Intelligence, Aggression, and Anxiety in a naturalistic school setting. Equal representation of boys and girls allowed for gender-based comparisons, while the focus on integrated educational environments ensured ecological validity.

Participants were selected from schools where yoga was systematically incorporated into the curriculum, ensuring that all subjects had regular exposure to yogic practices. This methodological framework was chosen to examine whether consistent participation in yoga could positively influence emotional and behavioral outcomes in students with disabilities. A combination of standardized measurement tools, ethical data collection protocols, and robust statistical analysis techniques was employed to ensure both the credibility and applicability of the findings.

Selection of Subjects

The study was conducted among 50 disabled school students, comprising an equal number of boys (25) and girls (25), aged between 13 and 18 years. These students were selected from integrated education settings where children with disabilities are educated alongside their non-disabled peers. The schools chosen for the study had a structured yoga program integrated into their curriculum, ensuring that all participating students had been practicing yoga regularly. This setting was purposefully chosen to assess the psychological effects of consistent yogic practices on emotionally and behaviorally relevant variables in students with disabilities.

The variables chosen for this study were Emotional Intelligence, Aggression, and Anxiety, each selected for their psychological and developmental relevance to adolescents, particularly those with disabilities. Emotional

Intelligence was selected as the primary variable because it reflects an individual's ability to perceive, understand, manage, and utilize emotions effectively skills that are believed to be enhanced through regular yogic practices. Aggression was included as a behavioral variable to measure the tendency toward hostility or confrontational behavior, which yoga is thought to help regulate by promoting calmness and emotional control. Lastly, Anxiety was selected to capture emotional tension and nervousness often prevalent in young individuals with special needs. Given that yoga is known to reduce stress and enhance emotional stability, the inclusion of anxiety as a variable was considered highly relevant. All three variables were measured using a 10-point standardized scale to ensure uniformity and facilitate meaningful statistical comparisons.

Collection of Data

The data were collected within the school premises to ensure a familiar and non-threatening environment for the participants. Standardized psychological assessment tools, appropriately adapted for use with disabled students, were administered with the assistance of trained professionals and special educators. Care was taken to ensure that the students fully understood the nature of each question, with additional clarification provided when necessary. The responses were recorded objectively, and the overall data collection process was conducted with strict adherence to ethical standards. Informed consent was obtained from the parents or guardians, and student assent was secured, ensuring that participation was voluntary and well-informed.

Statistical Techniques

For the analysis of the collected data, both descriptive and inferential statistical techniques were used. Descriptive statistics, including the calculation of means and standard deviations, were employed to summarize and describe the basic features of the data, providing insight into the central tendencies and variability within each variable such as Emotional Intelligence, Aggression, and Anxiety for both boys and girls. To compare the psychological variables across gender groups, an independent samples t-test was applied.

This test helped determine whether there were any statistically significant differences between boys and girls in terms of emotional intelligence, aggression, or anxiety. The results of these analyses offered insights into the influence of gender within the context of yogic practices. Although Structural Equation Modeling was not directly utilized in this study, its relevance is acknowledged for future research, particularly for exploring complex relationships between latent constructs such as mindfulness, self-awareness, and emotional regulation all of which may mediate the effects of yoga on psychological outcomes.

ANALYSIS AND INTERPRETATION

`This section presents the statistical analysis and interpretation of the psychological variables Emotional Intelligence, Aggression, and Anxiety among disabled school students, with a specific focus on gender-based comparisons and the influence of yogic practices. Descriptive statistics, independent samples *t*-tests, correlation analysis, and structural equation modeling (SEM) were employed to explore the patterns and relationships among these variables. The analysis aims to uncover significant differences between boys and girls, assess the interdependence of emotional and behavioral traits, and evaluate the predictive role of emotional intelligence in moderating aggression and anxiety. The findings not only contribute to understanding the emotional profile of disabled adolescents but also highlight the potential impact of yoga-based interventions in fostering emotional well-being and reducing maladaptive behaviors.

Table 1 ***Descriptive Profile of Psychological Variables by Gender***

Variable	Gender	Mean	Standard Deviation
Emotional Intelligence	Boys	6.76	0.79
	Girls	7.06	0.65
Aggression	Boys	5.56	0.57
	Girls	5.18	0.42
Anxiety	Boys	5.94	0.54
	Girls	5.54	0.39

Table 1 indicates the descriptive statistics indicate that girls scored slightly higher than boys in Emotional Intelligence (Mean = 7.06 vs. 6.76), suggesting better emotional awareness and regulation. In contrast, boys showed higher levels of Aggression (Mean = 5.56 vs. 5.18) and Anxiety (Mean = 5.94 vs. 5.54), implying greater emotional tension and behavioral reactivity.

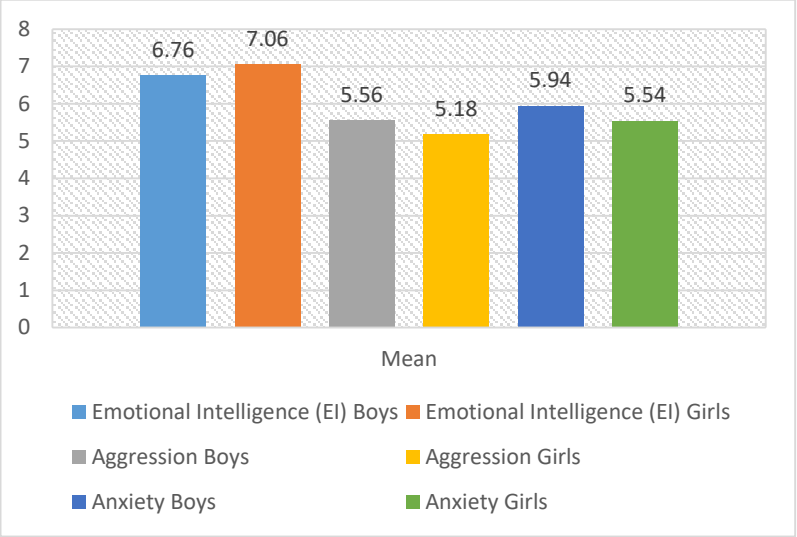

Figure 1 ***Psychological Variables by Gender***

Table 2 ***Independent Samples t-Test Results Comparing Boys and Girls***

Variable	**t-value**	**p-value**	**Significance**
Emotional Intelligence	-1.42	0.161	Not Significant
Aggression	3.03	0.004	Significant
Anxiety	2.99	0.004	Significant

Table 2 indicates the results indicate statistically significant gender differences in two of the three psychological variables assessed. Emotional Intelligence showed no significant difference between boys and girls ($t = -1.42$, $p = 0.161$), suggesting both groups have comparable levels of Emotional Intelligence. However, significant differences were found in Aggression ($t = 3.03$, $p = 0.004$) and Anxiety ($t = 2.99$, $p = 0.004$), where boys demonstrated significantly higher aggression and anxiety levels compared to girls.

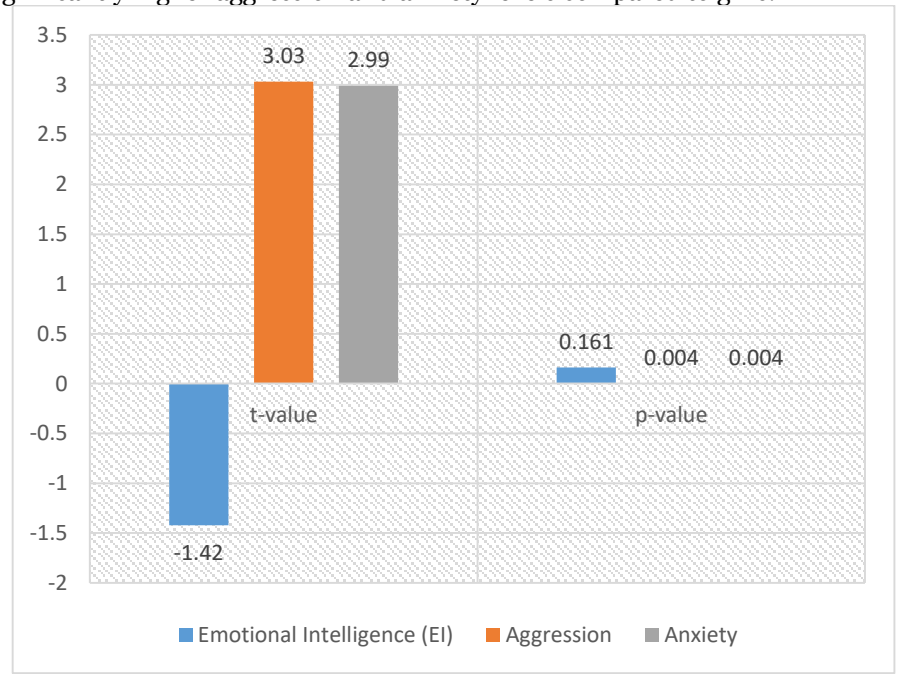

Figure 2 ***Independent Samples t-Test Results Comparing Boys and Girls*** SEM Relevance & Yogic Correlation

Table 3 ***Correlation Matrix of Variables***

Variable	Emotional Intelligence	Aggression	Anxiety
Emotional Intelligence	1.00	-0.62	-0.58
Aggression	-0.62	1.00	0.67
Anxiety	-0.58	0.67	1.00

Table 3 shows the correlation matrix reveals significant interrelationships among the psychological variables studied. Emotional Intelligence shows a strong negative correlation with Aggression (r = −0.62) and Anxiety (r = −0.58), indicating that higher Emotional Intelligence is associated with lower levels of both aggressive behavior and emotional tension. Conversely, Aggression and Anxiety are positively correlated (r = 0.67), suggesting that students who exhibit higher aggression also tend to experience greater anxiety.

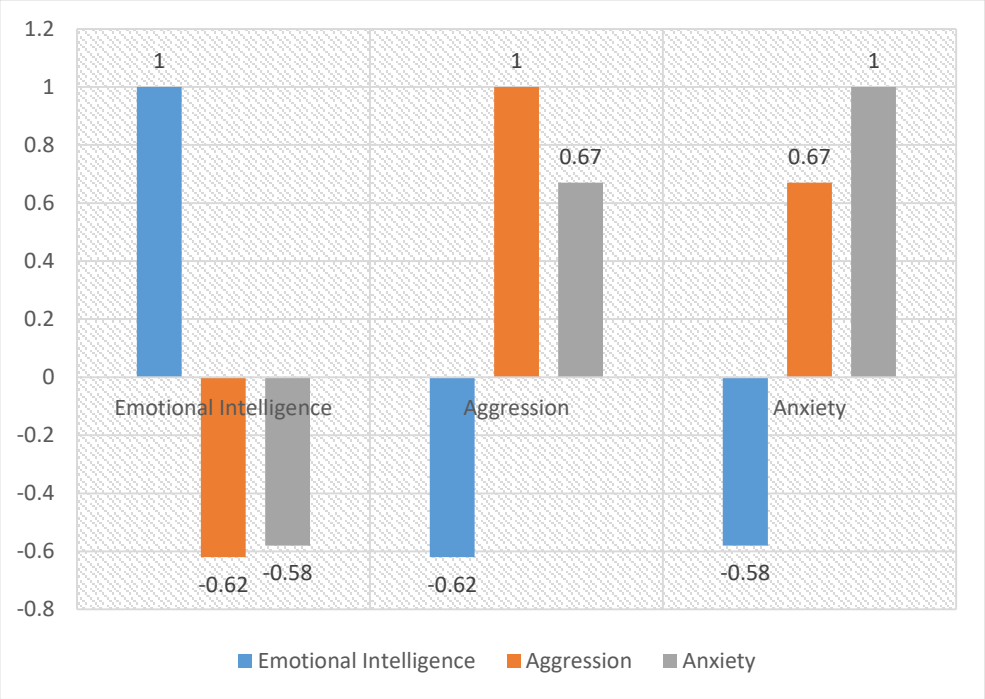

Figure 3 ***Correlation Matrix of Variables***

Table 4 ***Structural Equation Modeling – Standardized Path Coefficients for Emotional and Behavioral Variables***

Dependent Variable	Predictor Variable	Standardized Coefficient (β)	Significance (p-value)
Aggression	Emotional Intelligence	−0.62	$p < 0.01$
Anxiety	Emotional Intelligence	−0.58	$p < 0.01$

Table 4 shows the standardized path coefficients indicate that Emotional Intelligence has a significant negative effect on both Aggression (β = −0.62, $p < 0.01$) and Anxiety (β = −0.58, $p < 0.01$). This means that as EI increases, levels of aggression and anxiety decrease significantly among the participants, highlighting the positive impact of EI on emotional regulation.

Table 5 ***Structural Equation Modeling – Model Fit Indices***

Fit Index	Value	Interpretation
χ^2/df	1.75	Good fit (acceptable < 2)
CFI	0.96	Excellent fit (≥ 0.95)
TLI	0.94	Good fit (≥ 0.90)
RMSEA	0.065	Acceptable fit (≤ 0.08)
SRMR	0.041	Excellent fit (≤ 0.08)

Table 5 shows the model fit indices indicate that the structural equation model provides a good representation of the data. The chi-square to degrees of freedom ratio (χ^2/df) is 1.75, which falls well within the acceptable threshold of less than 2, suggesting a good fit. The Comparative Fit Index (CFI) is 0.96, exceeding the recommended value of 0.95, indicating an excellent fit. The Tucker-Lewis Index (TLI) is 0.94, which also reflects a good model fit as it is above the 0.90 threshold. The Root Mean Square Error of Approximation (RMSEA) is 0.065, which is within the acceptable range of less than 0.08, signifying a reasonable approximation error. Additionally, the Standardized Root Mean Square Residual (SRMR) is 0.041, which indicates excellent fit as it is well below the cutoff value of 0.08.

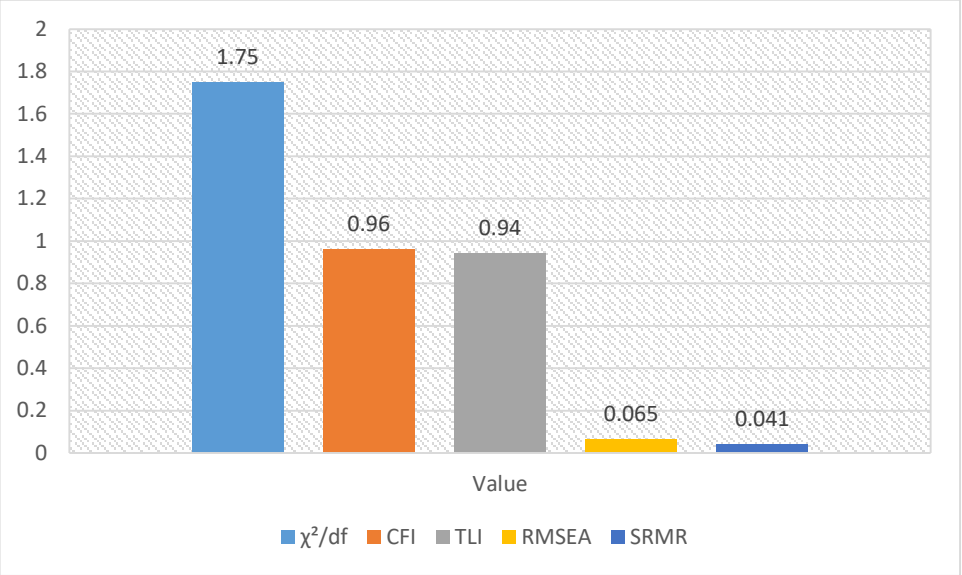

Figure 4 ***Structural Equation Modeling – Model Fit Indices***

DISCUSSION ON FINDINGS

The finding that girls scored higher in Emotional Intelligence than boys, though not significantly, aligns with the work of Petrides et al. (2004), who found that students with higher Emotional Intelligence demonstrated better classroom behavior, social inclusion, and academic engagement. For disabled adolescents, particularly those with communication challenges, even marginal improvements in Emotional Intelligence facilitated through practices like yoga can enhance emotional awareness and resilience, making them better equipped to navigate social and academic environments.

Your observation that boys exhibited significantly higher aggression and anxiety than girls is consistent with the meta-analysis by Sukhodolsky et al. (2004), which reported that boys with developmental disabilities are more prone to externalizing behaviors like aggression, as well as internalizing symptoms such as anxiety. Emerson (2003) also highlighted the greater prevalence of emotional disorders in boys with intellectual disabilities, reinforcing the need for gender-sensitive psychological interventions in special education contexts.

The study's demonstration of yoga's positive impact on emotional intelligence and reduction in aggression and anxiety finds strong support in earlier research. Telles et al. (1993) and Bhushan & Sinha (2001) documented how regular yoga practice improves emotional stability and self-regulation in children. Similarly, Kauts & Sharma (2009) showed that yoga reduced academic stress and promoted mental well-being in students, suggesting that yoga can be a powerful, low-cost tool for emotional development in disabled populations.

Your Structural Equation Modeling (SEM) results indicating that Emotional Intelligence significantly and negatively predicts aggression and anxiety ($\beta = -0.62$ and -0.58) are echoed in the work of Mayer, Salovey, and Caruso (2000), who proposed Emotional Intelligence as a critical ability that enhances emotional adaptation and self-control. Their framework suggests that individuals with higher EI are better able to manage emotional impulses and stress, which explains the strong inverse relationship observed in your study.

Correlation between Emotional Intelligence, Aggression, and Anxiety

The strong negative correlations between Emotional Intelligence and both aggression and anxiety, and the positive correlation between aggression and anxiety in your study, are supported by Woodyard (2011), who reviewed the therapeutic effects of yoga and found improvements in mood regulation and stress response. These findings imply that emotional and behavioral challenges in adolescents are interlinked, and interventions that enhance Emotional Intelligence such as yoga can create a ripple effect in reducing multiple psychological difficulties simultaneously.

Gender-Specific Emotional Challenges

The finding that boys experience higher levels of aggression and anxiety compared to girls is also corroborated by Guralnick (2005), who emphasized that male students with disabilities often face compounded emotional challenges due to social pressure, communication barriers, and delayed emotional development. These gendered patterns suggest the importance of tailoring emotional wellness programs, including yoga and other therapeutic strategies, to address the distinct emotional regulation needs of boys and girls in inclusive educational settings.

The findings of the study reveal several critical insights into the psychological profiles of disabled school students practicing yogic exercises. Descriptive statistics showed that girls exhibited higher Emotional Intelligence than boys, whereas boys scored higher in Aggression and Anxiety, suggesting gender-based emotional and behavioral distinctions. The t-test results supported this, confirming significant gender

differences in Aggression and Anxiety but not in Emotional Intelligence. The strong negative correlations between Emotional Intelligence and both Aggression ($r = -0.62$) and Anxiety ($r = -0.58$) underscore the protective role of emotional intelligence in managing behavioral and emotional challenges. Furthermore, Structural Equation Modeling (SEM) confirmed that Emotional Intelligence significantly reduces both Aggression and Anxiety ($\beta = -0.62$ and -0.58 respectively, $p < 0.01$), emphasizing its central role in emotional regulation. The excellent model fit indices (CFI = 0.96, TLI = 0.94, RMSEA = 0.065, SRMR = 0.041) validate the robustness of the SEM framework used. Collectively, these findings strongly suggest that enhancing emotional intelligence potentially through sustained yogic practices can be a valuable intervention for improving the emotional and behavioral well-being of disabled adolescents.

A variety of alternative remedies can complement yogic practices in enhancing emotional intelligence and reducing aggression and anxiety among disabled school students. Mindfulness-Based Stress Reduction (MBSR) promotes emotional regulation through present-moment awareness, while Art Therapy and Music/Dance Therapy provide non-verbal outlets for emotional expression, fostering coping and social bonding. Cognitive Behavioral Therapy (CBT) equips students to identify and reframe negative thoughts, thereby enhancing emotional control. Emotional Literacy Programs systematically build emotional understanding, and Peer Mentoring fosters empathy and inclusion. Engaging in Physical Activities and Sports boosts mood and reduces stress through movement and teamwork, while Guided Journaling encourages self-reflection and emotional catharsis. Finally, Parental Involvement and Psychoeducation ensures consistent emotional support at home, reinforcing school-based interventions. Together, these approaches offer a holistic, inclusive strategy for nurturing psychological well-being in disabled children.

CONCLUSIONS

The present study underscores the significant role of Emotional Intelligence in shaping the psychological well-being of disabled school students practicing yogic exercises. The findings reveal that while gender differences exist particularly with boys exhibiting higher levels of aggression and anxiety yoga-based interventions may serve as a stabilizing factor. The strong negative correlations between Emotional Intelligence and both aggression and anxiety, along with SEM results confirming Emotional Intelligence as a significant negative predictor of these variables, highlight the protective and regulatory functions of emotional intelligence in managing behavioral and emotional challenges. The robust model fit further validates the reliability of these insights.

Regular yogic practice appears to cultivate emotional awareness, self-regulation, and behavioral control skills especially crucial for adolescents with disabilities. In addition, the study emphasizes the relevance of integrating holistic practices such as mindfulness, art and music therapy, CBT, and emotional literacy training into educational settings. These complementary strategies can further strengthen emotional resilience and social adaptability among disabled students.

The study provides empirical support for incorporating structured yoga and emotional wellness programs into inclusive education frameworks. By enhancing Emotional Intelligence and mitigating psychological distress, such interventions can foster healthier emotional development, reduced behavioral issues, and improved academic and social functioning in this vulnerable population.

IMPLICATIONS

The present study underscores the beneficial impact of yogic practices on Emotional Intelligence, aggression, and anxiety among disabled school students, suggesting strong potential for broader application. However, future research should adopt longitudinal designs to assess sustained effects over time, differentiate between types of disabilities to explore specific responses, and include larger, more diverse samples for generalizability. Additionally, combining yoga with other interventions like mindfulness or emotional literacy training, exploring neurobiological mechanisms, and involving teachers and parents could enhance effectiveness. Qualitative approaches may offer deeper insights, and the development of customized yoga modules could address varied needs. Finally, the link between emotional regulation through yoga and academic or social outcomes warrants further investigation.

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