



Identifying and Supporting Twice-Exceptional Students with Emotional and Behavioral Disorders: Perspectives of Primary School Teachers

Diana Oman

Elementary school Artače, Slovenia, dianaoman@gmail.com

Mojca Kukanja Gabrijelčič

University of Primorska, Faculty of Education, Slovenia,
mojca.k.gabrijelcic@pef.upr.si

Vanja Riccarda Kiswarday

University of Primorska, Faculty of Education, Slovenia,
vanjariccarda.kiswarday@pef.upr.si

This study investigates how primary school teachers recognize and support twice-exceptional students—those who exhibit both high cognitive potential and emotional or behavioral disorders. The objective is to explore the extent to which these students are identified in school settings and to examine professional awareness, attitudes, and practices regarding their needs. Due to the complex and often contradictory nature of their profiles, the giftedness of twice-exceptional students is frequently overlooked, especially when behavioral and emotional difficulties obscure their academic potential. Relying primarily on quantitative descriptive methods, the research surveyed education professionals on their knowledge and recognition of twice-exceptionality. The findings reveal a persistent reliance on traditional markers of giftedness, such as measurable academic performance, with insufficient attention paid to behavioral and emotional indicators. The study emphasizes the need for a multidimensional and holistic approach to giftedness identification, combining academic, psychological, and behavioral assessments. It further calls for systematic professional development and institutional adjustments to ensure these students receive adequate support, preventing their marginalization and enabling the full realization of their potential.

Keywords: giftedness, twice-exceptionality, emotional and behavioral difficulties, professional recognition, identification, complex needs, diagnostic approach

INTRODUCTION

Twice-exceptional students, who possess high cognitive abilities alongside various challenges such as learning disabilities, attention disorders, or autism spectrum disorders, represent a unique and complex group in education (Baum, Schader, &

Citation: Oman, D., Gabrijelčič, M. K., & Kiswarday, V. R. (2025). Identifying and supporting twice-exceptional students with emotional and behavioral disorders: Perspectives of primary school teachers. *International Journal of Instruction*, 18(4), 459-476.

Owen, 2021; Reis et al., 2014). These students are often overlooked or misidentified because their combination of strengths and weaknesses makes it difficult for educators to provide appropriate support (Reis, Baum, & Burke, 2014). This dual nature of giftedness and disability presents a paradox, creating confusion for both parents and professionals alike (Magajna, 2007; Trail, 2022). Despite their potential for high achievement, many twice-exceptional students fail to thrive academically because school systems often do not recognize or accommodate their distinct needs (Foley-Nicpon et al., 2010). The beliefs and awareness of educators significantly influence how these students are identified and supported in the classroom (Ayasrah et al., 2024; Bianco, 2005). The importance of this study lies in its focus on understanding how primary school teachers recognize and respond to twice-exceptionality, especially in students exhibiting emotional and behavioral difficulties. This is a critical issue because such challenges can obscure the recognition of giftedness, preventing students from receiving the support they need to reach their full potential. The study aims to investigate teachers' perceptions of twice-exceptionality, their ability to identify giftedness in the presence of behavioral difficulties, and the accuracy and inclusivity of current identification practices. By examining the attitudes and practices of educators, this research seeks to address gaps in the recognition process and propose strategies for improving the identification and support of twice-exceptional students. Ultimately, this study contributes to advancing educational practices that can better accommodate and nurture the abilities of twice-exceptional learners.

Theoretical Framework

Twice-exceptional Students and Their Identification

Twice-exceptional (2e) students are individuals who combine above-average intellectual abilities with learning difficulties, such as dyslexia, ADHD, autism, or other neurological disorders. The concept of twice-exceptionality can be broadly defined as a combination of giftedness and special needs, or more narrowly as the combination of giftedness with specific learning difficulties or deficits in individual areas that impact academic success (Assouline, Nicpon & Whiteman, 2010; Bianco & Leach, 2010). Twice-exceptional students present unique challenges for teachers, counselors, and parents, as their identification is often hindered by the uneven distribution of their strengths and weaknesses (Reis, Baum & Burke, 2014). Although research confirms that students with high IQs and exceptional creativity can also have emotional and behavioral disorders (EBD), these students have often been overlooked in the literature on twice-exceptionality (Bianco & Leach, 2010; Kalbfleisch & Iguchi, 2008). Consequently, teachers often struggle to recognize the characteristics of these students and adjust instruction accordingly.

One of the main barriers to identifying twice-exceptional students is their heterogeneity, as they do not exhibit a typical behavioral pattern or uniform expression of twice-exceptionality (Magajna, 2007). Research shows that the lack of uniform identification practices, inadequate teacher expectations, and insufficient knowledge among professionals about twice-exceptional students often hinder timely recognition (Josephson, Wolfgang & Mehrenberg, 2018; Neihart, 2008). Another contributing

factor is the absence of systematic data collection on twice-exceptional students within the educational system (Foley-Nicpon et al., 2010). Baum et al. (2014) emphasize the problem of comorbidity, where the interaction of giftedness and special needs can prevent the recognition of a child's full potential (Reis et al., 2014). IQ tests are often not recommended in identifying twice-exceptional students (Morrison & Rizza, 2007), as concurrent factors may "mask" a student's abilities, leading to lower, average, or uneven test scores. While IQ tests can be useful, the complexity of identifying twice-exceptional students calls for the use of multiple identification methods (ibid). This is especially important for identifying children with EBD, as they may struggle to engage with teachers and are often among the least desired students in the classroom (Bianco, 2005). One promising method to complement the RTL (Response to Intervention) model in identifying the academic strengths of students with EBD, including twice-exceptional students, is the Positive Behavioral Support System (Davis et al., 2011). This approach has proven effective in identifying students at risk due to EBD while also identifying their academic strengths and weaknesses and developing interventions that address both aspects (Cheney et al., 2008; Davis et al., 2011).

Gifted Students with Emotional and Behavioral Disorders (EBD)

Gifted students with emotional and behavioral difficulties represent a specific population that requires a holistic and interdisciplinary approach. These students often experience intense emotional reactions and struggle to establish and maintain interpersonal relationships, especially within peer groups. Despite their possible high intellectual capacity, they frequently feel isolated and frustrated due to a lack of understanding from their environment. A comprehensive understanding of the interplay between their emotional needs and cognitive potential is crucial, as appropriate support can enable their creativity and critical thinking skills to contribute significantly to both academic and broader societal contexts. According to Morrison (2001), gifted students and those with emotional or behavioral disorders share three key characteristics: high academic ability, creative thinking, and a tendency to exhibit negative or challenging behaviors. The first two traits often surprise educators, as students with emotional or behavioral difficulties are not typically seen as academically successful (Kranjec & Bakračević, 2023; Neumann, 2004). Moreover, academic pressure—whether in the form of expectations to meet or exceed standards—often results in emotional distress, manifesting as frustration or aggressive behavior (Morrison, 2001). Given these similarities, it is unsurprising that a student may fit the definition of twice-exceptionality, meaning the coexistence of giftedness and emotional or behavioral disorders (Reid & McGuire, 1995). However, the fact that gifted students in certain situations exhibit behavioral characteristics typical of students with emotional and behavioral disorders does not necessarily indicate the presence of an official dual diagnosis. This phenomenon presents a challenge in reliably identifying and properly diagnosing twice-exceptional students (Morrison, 2001).

Research on the identification and support of gifted students with emotional and behavioral difficulties remains limited (Bianco & Leach, 2010; Morrison, 2001; Rizza & Morrison, 2003), with the most significant contributions to the field found in Morrison's works (2000–2001). Morrison (2001) notes that existing screening methods

and diagnostic approaches are not sufficiently effective in identifying this population, as standardized diagnostic procedures tend to detect negative behavioral aspects more often than a student's intellectual strengths. As a result, many gifted students with emotional and behavioral difficulties remain unrecognized, and their academic potential frequently goes untapped. Emotional and behavioral disorders include students who, due to significant difficulties in regulating emotions and behavior, fail to meet expected academic achievements. Key indicators of mental disorders, as defined by Kauffman, Simpson, and Mock (2009), include mood disorders (e.g., depression and bipolar disorder, characterized by persistent dysphoric moods or alternating periods of euphoria and depression); anxiety disorders (expressed as excessive anxiety, fears, and avoidant behavior); oppositional defiant disorder (characterized by persistent disobedient, hostile, and defiant behavior toward authority figures); behavioral disorders (including aggressive, disruptive, or covert antisocial behavior); and schizophrenia (a disorder characterized by psychotic episodes, distorted thought processes, and abnormal perceptions of reality).

Students in this group often struggle to establish and maintain interpersonal relationships, display inappropriate behavior or emotional responses in typical situations, and experience prolonged depressive moods or somatic issues related to personal or academic stress. Gifted students with emotional and behavioral difficulties are particularly vulnerable to psychological and emotional distress, especially when physical, psychological, or academic barriers hinder their potential. Among the most common challenges they face are fear of failure, depression, feelings of isolation, and socio-emotional difficulties (Eklund & Dowdy, 2014). These students may develop strategies to mask negative emotions, leading to somatization, or burnout, where emotional distress manifests as physical symptoms (Jackson & Peterson, 2003), further complicating identification and appropriate psychological intervention. A systemic issue is the mismatch between the intellectual abilities of gifted students and the educational curriculum, which can lead to inattention and hyperactivity, often misdiagnosed as ADHD (Antshel et al., 2008). Additionally, research indicates that many gifted students with EBD exhibit overlapping characteristics with other conditions, such as ADHD, autism, or specific emotional disorders (Bailey & Rose, 2011; McFadden, 2017). As a result, these students are often misunderstood and underidentified, as their high cognitive abilities can mask underlying difficulties.

The attitudes of educators toward gifted students with emotional and behavioral difficulties are also crucial in the identification process and, consequently, the quality of support provided (Geake & Gross, 2008). Empirical research confirms that these students require specialized and tailored educational approaches, as many fail to reach their potential due to inadequately addressed emotional and behavioral needs (Reis & McCoach, 2000; Martin, Burns, & Schonlau, 2010). Effective support for this group necessitates the development of innovative pedagogical strategies, a comprehensive assessment of students' strengths, and the systematic implementation of individualized intervention approaches that foster both intellectual development and emotional stability.

METHOD

The criteria currently used to identify giftedness are often misaligned with the needs of children with special needs, particularly those facing emotional and behavioral difficulties. These students are frequently not recognized as gifted and are primarily viewed through the lens of their behavioral issues, which can be disruptive, exhausting, and stressful for teachers. As a result, their intellectual potential often goes unrecognized. Even though these students may have individualized education plans (IEPs), they frequently do not receive the appropriate pedagogical support, leading to disadvantages both academically and socially. The absence of adequate criteria for identifying giftedness, coupled with the lack of adapted teaching strategies for this specific group, can have far-reaching consequences for their further development and integration into the education system and even in further professional development.

Purpose of the Study

The purpose of this study was to investigate the recognition and support of twice-exceptional students—those who possess high cognitive potential alongside emotional and behavioral difficulties—by education professionals. These students often remain unidentified due to inadequacies in current identification criteria and are viewed primarily through the lens of their behavioral challenges, resulting in underrecognition of their intellectual capabilities. The study aims to underscore the importance of early, accurate identification and the application of a tailored educational approach within school systems.

Research Objectives, Research Questions, and Hypotheses

The study's objectives were: (i) To explore the opinions of education professionals regarding the current criteria used to identify giftedness in students with emotional and behavioral challenges; (ii) To assess the level of awareness among education professionals about twice-exceptionality and analyze their attitudes toward gifted students who exhibit emotional and behavioral difficulties.

Research Questions: RQ1: To what extent would education professionals recognize a gifted or twice-exceptional child based on a specific case study? RQ2: How do education professionals assess the impact of behavioral difficulties on the recognition of giftedness in children with emotional and behavioral challenges?

Hypotheses: H1: Education professionals are more likely to recognize giftedness in students when behavioral challenges are not prominently described. H2: Education professionals with prior training or awareness of twice-exceptionality are more likely to accurately identify twice-exceptional students in case-based scenarios.

Research Method

A quantitative descriptive research method was employed. This approach enabled the systematic collection and statistical analysis of data related to educators' awareness, perceptions, and practices concerning the identification of twice-exceptional students.

Research Sample

The research sample consisted of 114 education professionals from elementary schools in the Pomurje region of Slovenia, selected using a non-random convenience sampling method. All participants voluntarily agreed to take part in the study and were informed about the confidentiality and anonymity of their responses.

Gender: 93.0% identified as female, and 7.0% as male. Professional roles: Subject teachers (41.2%), classroom teachers (24.6%), and specialized professionals (22.8%), including special and rehabilitation pedagogues (8.8%), inclusive pedagogues (7.0%), and school counselors (7.0%). Years of experience: 33.3% had up to 10 years of experience, 32.5% had 11–20 years, 13.2% had 21–30 years, and 21.1% had more than 30 years. Although participants' ages were not recorded, professional experience was used as a proxy to understand their exposure to diverse student needs. Participants were selected based on their active professional roles in elementary school education, given their direct involvement in identifying and supporting students with exceptional needs.

Case Description Criteria

The cases presented in the questionnaire were developed based on expert consultations and aligned with diagnostic guidelines (e.g., DSM-5) for emotional and behavioral disorders. Each vignette described a student profile that combined behavioral/emotional challenges with indicators of cognitive strength. These hypothetical case studies were designed to simulate realistic classroom scenarios and served to assess how educators interpret and respond to twice-exceptionality.

Data Collection and Processing

Data were collected through an anonymous online questionnaire, specifically designed for this research. The survey was distributed via email to school administrators and educators across the Pomurje region. The questionnaire included closed-ended questions, Likert-scale items, and case-based scenarios assessing recognition and attitudes toward twice-exceptional students. Participants were informed about the purpose of the study, ethical considerations, and their right to decline participation. All participants who accessed the questionnaire agreed to participate, and no personal identifying information was collected. No follow-up was conducted in cases of non-response, in line with the ethical protocol for voluntary participation.

Data Analysis

Descriptive and inferential statistics were used to analyze the collected data. The software IBM SPSS Statistics was employed for the analysis. The following procedures were carried out: Descriptive Statistics - Frequencies, means, and percentages were computed to summarize demographic characteristics, training backgrounds, and responses to survey items (Pallant, 2020); Chi-Square Tests - Applied to examine the association between categorical variables, such as training in gifted education and correct recognition of twice-exceptional profiles (Field, 2018); Independent Samples t-tests: Conducted to compare recognition scores between educators with and without prior exposure to the concept of twice-exceptionality; Reliability Testing: Cronbach's

alpha was calculated to assess the internal consistency of attitude scales included in the questionnaire (DeVellis, 2017).

Limitations of the Study

Several limitations should be acknowledged. The use of a convenience sample from a specific region limits the generalization of the findings to broader populations. Additionally, the study relies on self-reported data, which may introduce response bias. The absence of age data is another limitation, although professional experience was used to offer insight into educators' backgrounds. Future studies should consider triangulating perspectives from students, parents, and school psychologists for a more holistic view.

FINDINGS

Recognition of Giftedness Based on Three Cases of Twice-Exceptionality in Students of Different Ages

Participants in the study had to decide for each of the three presented cases whether they believed the described child was recognized as gifted in school.

(1) Case 1: An 8-Year-Old Boy in 3rd Grade

"The first presented case describes an eight-year-old boy (3rd grade) who has many friends in class. His behavior is perceived as disruptive, as he frequently interrupts the teacher, asks unusual questions, or answers when someone else is too slow. His behavior is often oppositional, expressing loud disagreement, and in conflicts, he reacts with intense emotions such as anger, loud yelling, or even aggression, making it difficult to calm him down. He is very firm in his beliefs, arguing even with the teacher if he believes he is right. He demonstrates high abilities in mathematics and science, confirmed by outstanding achievements in various competitions (Kresnička, Kenguru, Logika). The boy also shows a strong interest in construction games, strong argumentative skills, persistence in his beliefs, and a pronounced sense of justice."

(i) Perception of Education Professionals on the Boy's Giftedness

67.5% of respondents believed the boy was recognized as gifted and 32.5% disagreed.

A chi-square test (χ^2) = 14.04; p = 0.00018 (α = 0.05) indicated that respondents significantly more often recognized the student as gifted than expected under an even distribution of responses.

(ii) Reasons for Recognizing Giftedness

Among the 58 respondents who argued their opinion the most commonly cited indicators of giftedness were: Competition achievements (51.7%), Argumentative ability (19.0%), Persistence in personal beliefs (17.2%), Asking unusual questions (17.2%). These responses reflect a traditional view of giftedness, focusing on measurable achievements and cognitive abilities while also recognizing behavioral traits such as curiosity, critical thinking, and logical reasoning skills.

(iii) Reasons for Not Recognizing Giftedness

Among the 26 respondents who did not recognize the student as gifted, the most frequently mentioned reasons were: Presence of other special needs that may cover giftedness (7.7%), Belief that his behavior is typical for his age (7.7%), Belief that competition achievements alone are insufficient to define giftedness (15.4%). These responses indicate that some professionals view giftedness holistically, considering not only intellectual abilities but also behavioral and emotional characteristics. They also highlight the often-overlooked phenomenon of twice-exceptionality, where gifted students are not recognized due to the presence of behavioral or emotional difficulties.

(2) Case 2: A 5th-Grade Boy

"The second case describes a 5th-grade boy with exceptional mathematical abilities and creativity in construction tasks and working with clay. However, he struggles with drawing and painting. He has a strong sense of justice and empathy, as seen in his emotional reaction when defending a friend with Down syndrome. Despite his strengths, he has behavioral and organizational difficulties, including impulsivity, difficulty maintaining attention, and frequent disruptions in class. He often forgets his responsibilities but can still answer all questions correctly."

(i) Perception of Educational Professionals on the Student's Giftedness

66.7% of surveyed professionals believed that the student was recognized as gifted, while 33.3% did not share this opinion. The calculated χ^2 test for this gifted student was 12.67, with $p = 0.00037$ ($\alpha = 0.05$), indicating that educational professionals statistically significantly more often identified the student as gifted than would be expected by random chance.

(ii) Reasons for Recognizing Giftedness

Among 56 professionals, the most common arguments for the student's giftedness were: exceptional achievements in mathematics (32.1%); empathetic behavior (23.2%); strong spatial-mathematical abilities (5.4%). Interestingly, some respondents also highlighted other dimensions, such as giftedness manifesting in boredom (10.7%) or even twice-exceptionality, where giftedness could coexist with behavioral disorders (autism, hyperactivity).

(iii) Reasons for Not Recognizing Giftedness

Among the 21 professionals who believed the student was not gifted, the most frequently cited reasons were: other challenges such as behavioral issues (19.0%); failure to meet formal criteria for giftedness (14.3%); social immaturity (9.5%). Interestingly, professionals placed greater emphasis on special needs than expected when assessing giftedness, as many did not recognize the student as gifted primarily due to his behavior and lack of social maturity.

The study results indicate that most professionals recognized the boy as gifted, mainly due to his mathematical and spatial abilities, as well as his high level of empathy.

However, a significant number of professionals did not recognize his giftedness due to behavioral issues and special needs. This suggests that identifying giftedness in twice-exceptional students is a particularly significant challenge. Students who excel in certain areas but struggle with behavioral or emotional difficulties are often not identified as gifted because traditional criteria for recognizing giftedness are too narrow and do not consider all dimensions of the student. This raises the question of the necessity for a broader and more holistic approach in identifying giftedness, taking into account both cognitive and socio-emotional characteristics.

(3) Case Study 3: The Seventh-Grade Student

"In the third case, we have a seventh-grade student who demonstrates exceptional abilities in mathematics and has a strong interest in astronomy. Despite his success in these areas, he avoids additional classes and competitions, believing they are not beneficial to him. He also possesses strong leadership skills and is known for influencing conversations and persuading others to follow his ideas. However, he also has pronounced emotional and behavioral difficulties. When someone disagrees with him or resists his ideas, he often reacts aggressively. When disappointed or angry, he struggles significantly with emotional regulation. Although he was an outstanding soccer goalkeeper, he quit training for emotional reasons, indicating low motivation due to poor adaptive skills and emotional vulnerability in the face of failure. His behavior is often manipulative and aimed primarily at achieving his own advantages.

(i) Perception of Educational Professionals on the Student's Giftedness

In the study, 44.7% of respondents believed that the student was recognized as gifted, while 55.3% did not. Interestingly, despite his obvious achievements in mathematics and leadership skills, the majority of professionals did not recognize his giftedness, mainly due to his emotional and behavioral difficulties. Since the χ^2 test for this student was 1.26 ($\alpha = 0.05$, $df = 1$: 3.841), this means there was no statistically significant difference in response distribution.

(ii) Reasons for Recognizing Giftedness

Among the 37 responses given by professionals who recognized the student as gifted, the most common reasons were: exceptional achievements and success (35.1%); innovation and ingenuity (16.2 mathematical abilities and creativity in other areas). However, some professionals noted that despite recognizing his giftedness, emotional and behavioral difficulties significantly affected their overall perception of the student. Aggressiveness, impulsivity, and lack of emotional maturity often led to the student being classified not as gifted but as a child with specific learning or behavioral difficulties.

(iii) Reasons for Not Recognizing Giftedness

Among the 35 responses from professionals who did not identify the student as gifted, the most common reasons were: emotional and behavioral difficulties (31.4%); a perceived lack of motivation and interest in learning or competitions (13.5%); and a

perception of mediocrity, where some believed the student simply stood out as a leader without having strong gifted traits (14.3%).

In this case, research results showed that most professionals, based on the provided student description, did not recognize him as gifted primarily due to his behavioral difficulties and lack of motivation. However, his exceptional achievements in mathematics and leadership skills were clear indicators of giftedness. These results suggest that the recognition of giftedness often decreases when emotional and behavioral difficulties are present, even when the student exhibits exceptional abilities in certain areas. Emotional maturity and motivation are often key factors in identifying giftedness, meaning that twice-exceptionality (giftedness combined with behavioral or emotional difficulties) is often overlooked or misinterpreted. Changing the approach to giftedness recognition—one that includes a comprehensive evaluation of all aspects of a student, such as social, emotional, cognitive, and motivational abilities—could contribute to a more holistic identification of giftedness and a more precise understanding of these children's potential.

The participating educators were unaware that all three descriptions referred to the same student, whose giftedness was not recognized due to emotional and behavioral difficulties. The descriptions of the boy's functioning reveal that, due to a lack of support for his giftedness, his motivation for creative engagement in learning gradually declined over the years, while his emotional and behavioral difficulties worsened. The declining recognition of his giftedness is reflected in the survey results: In 3rd grade, 67.5% recognized him as gifted; In 5th grade, 66.7% recognized him as gifted and in 7th grade, only 44.7% still recognized him as gifted.

Based on the study's outcomes, there is a strong indication that professionals struggle to recognize giftedness in students with emotional and behavioral difficulties, often focusing narrowly on traditional criteria. Recommendations include adopting a broader assessment framework that considers socio-emotional, cognitive, and motivational factors to enhance the recognition and support of twice-exceptional students in educational settings.

Knowledge of Twice Exceptionality and Encountered Combinations of Giftedness and Special Needs

With the questionnaire, we sought to assess the level of knowledge regarding the term "twice exceptionality" among professionals. Additionally, we aimed to identify which combinations of giftedness and special needs professionals had encountered, as well as investigate which combination was most common. The results indicate that 64.9% of the surveyed professionals have heard of the term "twice exceptionality", suggesting that the term is fairly well-known. The most common combinations encountered by professionals were gifted children with emotional and behavioral difficulties (56.1%) or attention deficit and hyperactivity disorder (ADHD) (54.4%). These two conditions are more commonly recognized when associated with giftedness. On the other hand, professionals least often encountered gifted children with intellectual disabilities (6.1%), or sensory issues (2.4%), which could suggest that these combinations are either less common or harder to identify in the educational environment.

The chi-square value of $\chi^2 = 10.14$ is greater than the critical value of 3.841, indicating that there is a statistically significant difference between the observed and expected values. This result confirms that most professionals are familiar with the term "twice exceptionality" and encounter various cases of children demonstrating this condition. However, the recognition and understanding of twice exceptionality is often linked to specific learning disabilities, emotional and behavioral difficulties and attention deficit and hyperactivity disorders, that all lie under the umbrella of neurodiversity. For this group Baum (1985, in Brody & Mills, 1997, p. 283) notes that one-third of individuals show high intellectual abilities and exceptionalities in specific areas.

Identifying Twice Exceptional Children

The results connected to this question provide valuable insights into professionals' practices regarding the identification and documentation of twice exceptional children. The analysis reveals that only 21.9% of the surveyed professionals have recognized and personally documented a twice -exceptional child, while 78.1% have not had such an experience. This finding allows us to draw several important conclusions. Despite the fact that 64.9% of respondents are familiar with the term "twice exceptionality", only a smaller part (21.9%) have personally documented such children. This suggests that even when professionals are theoretically aware of twice exceptionality, they may not have the proper training or procedures in place to systematically identify and address these children in practice.

With a chi-square value of $\chi^2 = 35.90$, which is greater than the critical value of 3.841, we again reject the null hypothesis, indicating a statistically significant difference between the observed and expected values. This result confirms that, although many professionals recognize giftedness, they do not always identify it in connection with the presence of other special needs (such as emotional and behavioral difficulties).

The fact that only about one-fifth of professionals have documented twice exceptional children points to potential gaps in the educational system's ability to systematically identify and support these students. Twice exceptionality involves both giftedness and the presence of another challenge (e.g., learning difficulties, emotional and behavioral issues, autism), and teachers may not always be trained to recognize and address all of these needs simultaneously. Furthermore, undesirable behavior often attracts more attention than the child's concurrent giftedness. The lack of proper documentation could also be attributed to specific barriers within the school system, such as the overload of educational staff, a lack of time for individualized monitoring, insufficient collaboration between professionals from different fields, or simply a lack of knowledge about the proper procedures for documenting cases of twice exceptionality.

The majority of professionals not documenting twice -exceptional children indicates potential gaps in the educational system's capacity to train professionals to recognize and address these children's needs. This highlights the need for further education and training, enabling teachers and other professionals to detect twice exceptionality and understand the procedures required for proper documentation and support. Failure to

identify and document twice -exceptional children early in their schooling may hinder their development, as they may not receive the appropriate support to express and develop both their giftedness and address their special needs (e.g., learning difficulties, emotional and behavioral issues). As Brody & Mills (1997) and Dilman et al. (2013) suggest, without proper support, these children may experience dissatisfaction, learning difficulties, lack of motivation, low self-esteem, oppositional behavior, and, in extreme cases, self-exclusion from the school environment.

DISCUSSION

The results of this study offer valuable insights into the challenges faced by education professionals in recognizing giftedness in students with emotional and behavioral difficulties. The findings suggest that while many education professionals can identify giftedness based on cognitive achievements and behavioral traits, the presence of emotional and behavioral difficulties complicates this recognition. This aligns with the study's research questions and hypotheses, which sought to explore how education professionals perceive and assess giftedness in twice-exceptional students and how behavioral difficulties impact this process.

RQ1: To what extent would education professionals recognize a gifted or twice-exceptional child based on a specific case study? The results demonstrate that education professionals are more likely to recognize giftedness when behavioral difficulties are not prominently described. Case 1 (the 8-year-old boy in 3rd grade) received the highest percentage of recognition, with 67.5% of participants identifying him as gifted, despite his disruptive behavior. This finding is consistent with the hypothesis that education professionals are more likely to recognize giftedness when behavioral challenges are not emphasized. The professionals in this case focused on the child's cognitive abilities, as evidenced by his success in mathematics and science competitions, his argumentative skills, and his interest in construction games. These cognitive attributes are often seen as indicative of giftedness, which suggests that traditional criteria for identifying gifted students, such as academic performance and specific talents, play a significant role in the recognition process. However, the fact that 32.5% of respondents did not recognize this student as gifted highlights a gap in the recognition process. Many professionals attributed this to his disruptive behavior or special needs, indicating that behavioral challenges may overshadow giftedness in the identification process. These results align with the existing literature (Foley-Nicpon et al., 2010), which suggests that students with emotional or behavioral difficulties often go unrecognized due to the focus on behavioral issues rather than cognitive abilities.

RQ2: How do education professionals assess the impact of behavioral difficulties on the recognition of giftedness in children with emotional and behavioral challenges? The results of Case 2 (the 5th-grade boy) and Case 3 (the 7th-grade student) provide further evidence that emotional and behavioral difficulties significantly impact the recognition of giftedness. In Case 2, where the student exhibited exceptional mathematical abilities but also faced impulsivity and organizational difficulties, 66.7% of respondents recognized him as gifted. However, 33.3% did not, citing his behavioral challenges, such as impulsivity and social immaturity, as the primary reasons for not recognizing

his giftedness. This suggests that professionals tend to prioritize behavioral issues over cognitive potential, thus underestimating the giftedness of students with special needs.

In Case 3, despite the student's exceptional abilities in mathematics and leadership, 55.3% of respondents did not recognize him as gifted, primarily due to his emotional and behavioral difficulties. The lack of recognition in this case underscores the significant influence that emotional and behavioral difficulties have on the perception of giftedness. Even when students exhibit clear cognitive and leadership skills, their emotional and behavioral difficulties often lead professionals to categorize them as having learning or behavioral problems rather than recognizing their potential for giftedness. These findings support the hypothesis that education professionals' perceptions of giftedness are influenced by the prominence of behavioral challenges. The more significant the emotional and behavioral difficulties, the less likely education professionals are to recognize the child's giftedness. This phenomenon is consistent with the concept of twice-exceptionality, where giftedness is often masked by behavioral and emotional issues, leading to an incomplete or inaccurate identification process (Bianco, 2005; Foley-Nicpon et al., 2010).

The results of this study emphasize the importance of adopting a more comprehensive and inclusive approach to identifying giftedness in students with emotional and behavioral difficulties. Traditional identification methods, which focus heavily on academic performance and standardized testing, are insufficient for recognizing the full potential of twice-exceptional students. Instead, a more holistic approach that considers a range of factors—cognitive, emotional, behavioral, and motivational—is necessary to identify and support these students effectively. The decline in recognition of the student's giftedness across the three case studies (from 67.5% in 3rd grade to 44.7% in 7th grade) highlights the need for ongoing support and a dynamic approach to identification. As students grow older, their emotional and behavioral difficulties may become more pronounced, leading to a reduced recognition of their giftedness. This suggests that early intervention and continuous reassessment are crucial to ensuring that gifted students with emotional and behavioral difficulties are not overlooked.

To address these challenges, we recommend that education professionals undergo further training on the identification of twice-exceptional students. This training should emphasize the importance of recognizing both cognitive abilities and emotional/behavioral characteristics in the identification process. Furthermore, schools should consider adopting a multi-dimensional assessment approach that includes input from teachers, counselors, and psychologists, as well as standardized tests and observations of students' social and emotional functioning. Additionally, education professionals should be encouraged to take a more individualized approach to recognizing giftedness, considering not only academic achievement but also other indicators of potential, such as creativity, leadership skills, and problem-solving abilities. The results of this study suggest that many education professionals may not be aware of the complexities involved in identifying twice-exceptional students, and thus, increasing awareness and providing professional development opportunities could lead to more accurate identification and better support for these students.

LIMITATIONS

While this study provides important insights into the recognition of twice-exceptional students with emotional and behavioral disorders, certain limitations should be acknowledged. The study focused on educational professionals from a specific region, which may limit the generalizability of the findings to other cultural and educational contexts. Additionally, the reliance on self-reported data introduces the possibility of bias, as perceptions and experiences may vary among respondents. Future research could expand by incorporating qualitative methods, such as interviews or case studies, to gain deeper insights into the challenges of identifying and supporting twice-exceptional students. Longitudinal studies could also explore how recognition and support for these students evolve over time. Furthermore, developing standardized tools and training programs for educators could improve early identification and intervention strategies, ensuring that twice-exceptional students receive the necessary support to reach their full potential.

CONCLUSION

The objective of this study was to explore the challenges faced in recognizing and supporting twice-exceptional students—those with both giftedness and emotional or behavioral difficulties. These students often fail to receive the appropriate educational support because their giftedness is overshadowed by their behavioral challenges. This study highlights the gap between the theoretical understanding of twice-exceptionality among education professionals and their practical ability to identify and address the needs of these students.

Our findings underscore the difficulty educators face in recognizing twice-exceptionality, with giftedness often being masked by behavioral and emotional issues. As anticipated, the recognition of giftedness in students with emotional and behavioral disorders was primarily influenced by teachers' focus on observable behaviors such as attentiveness and emotional regulation, rather than a comprehensive assessment of cognitive potential. This supports the central objective of our study to explore how educators recognize giftedness in students with emotional and behavioral disorders, and whether current identification methods align with the complex needs of twice-exceptional students. The results also indicate that current methods for identifying giftedness, typically based on standardized tests and academic performance, are inadequate for recognizing students with emotional and behavioral difficulties. This reinforces the need for a more holistic and inclusive approach to identifying giftedness, as outlined in the study's objective. While education professionals are generally aware of the concept of twice-exceptionality, many lack the practical tools and training to identify giftedness in students facing behavioral and emotional challenges.

The study's findings corroborate existing research, such as that by Foley-Nicpon et al. (2010), who emphasized that twice-exceptional students are frequently overlooked due to behavioral challenges. Our findings also echo Bianco's (2005) assertion that teachers' beliefs and awareness significantly impact the identification and support of gifted students with special needs. These insights suggest that increased professional development is essential to help educators more effectively recognize and support

twice-exceptional students. Additionally, this study highlights the lack of systematic identification of twice-exceptional students, with only 21.9% of educators documenting twice-exceptionality. This further emphasizes the need for standardized criteria and specialized training to ensure that educators can recognize and support these students effectively. This aligns with the study's objective to explore how current systems for identifying giftedness fail to meet the needs of twice-exceptional students, and to propose strategies for improving their educational outcomes.

In conclusion, this study underscores the necessity of adopting a comprehensive and inclusive approach to identifying giftedness in students with emotional and behavioral difficulties. The findings demonstrate that traditional identification methods are insufficient for recognizing the potential of twice-exceptional students. To ensure that all students, including those who are twice-exceptional, can reach their full potential, we recommend the adoption of a more holistic approach to identification, involving multi-dimensional assessments and increased professional development for educators.

REFERENCES

- Ayasrah, S., Alnasraween, M., & Hanandeh, A. (2024). Exploring effective methods for identifying gifted and talented students. *International Journal of Instruction*, 17(1), 115–132. <https://doi.org/10.29333/iji.2024.1717a>
- Assouline, S. G., Foley Nicpon, M., & Whiteman, C. (2010). Cognitive and psychosocial characteristics of gifted students with written language disability. *Gifted Child Quarterly*, 54(2), 102–115. <https://doi.org/10.1177/0016986209355974>
- Antshel, K. M. (2008). Attention-deficit hyperactivity disorder in the context of a high intellectual quotient/giftedness. *Developmental Disabilities Research Reviews*, 14(4), 293–299. <https://doi.org/10.1002/ddrr.34>
- Baum, S. M., Schader, R. M., & Owen, S. V. (2021). *To be gifted and learning disabled: Strength-based strategies for helping twice-exceptional students with LD, ADHD, ASD, and more*. Routledge.
- Baum, S. M., Schader, R. M., & Hebert, T. P. (2014). Through a different lens: Reflecting on a strengths-based, talent-focused approach for twice-exceptional learners. *Gifted Child Quarterly*, 58(4), 247–331. <https://journals.sagepub.com/doi/epub/10.1177/0016986214547632>
- Bailey, C. L., & Rose, V. C. (2011). Examining teachers' perceptions of twice-exceptional students: Overview of a qualitative exploration. *Ideas and Research You Can Use: VISTAS*, 1-12.
- Bianco, M. (2005). The effects of disability labels on special and general education teachers' referrals for gifted programs. *Learning Disability Quarterly*, 28(4), 285–293. <https://doi.org/10.2307/4126967>

- Bianco, M., & Leach, N. (2010). Twice exceptional learners: Effects on teacher preparation and disability labels on gifted referrals. *Teacher Education and Special Education*, 33, 219–334. <https://doi.org/10.1177/0888406409356392>
- Cheney, D., Flower, A., & Templeton, T. (2008). Applying response to intervention metrics in the social domain for students at risk of developing emotional or behavioral disorders. *The Journal of Special Education*, 42(2), 108–126. <https://doi.org/10.1177/0022466907313349>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Davis, G., & Rimm, S. B. (2011). *Education of the gifted and talented* (6th ed.). Pearson. https://api.pageplace.de/preview/DT0400.9781292035130_A24589390/preview-9781292035130_A24589390.pdf
- DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th ed.). SAGE Publications.
- Eklund, K., & Dowdy, E. (2014). Screening for behavioral and emotional risk versus traditional school identification methods. *School Mental Health*, 6, 40–49. <https://doi.org/10.1007/s12310-013-9109-1>
- Field, A. P. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Foley-Nicpon, M., Doobay, A. F., & Assouline, S. G. (2010). Parent, teacher, and self-perception of psychosocial functioning in intellectually gifted children and adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 40(8), 1028–1038. <https://doi.org/10.1007/s10803-010-0952-3>
- Geake, J. G., & Gross, M. U. (2008). Teachers' negative affect toward academically gifted students: An evolutionary psychological study. *Gifted Child Quarterly*, 52(3), 217–231. <https://doi.org/10.1177/0016986208319704>
- Jackson, P. S., & Peterson, J. (2003). Depressive disorder in highly gifted adolescents. *Journal of Secondary Gifted Education*, 14(3), 175–186. <https://doi.org/10.4219/jsge-2003-429>
- Josephson, J., Wolfgang, C., & Mehrenberg, R. (2018). Strategies for supporting students who are twice-exceptional. *The Journal of Special Education Apprenticeship*, 7(2). <https://doi.org/10.58729/2167-3454.1073>
- Kalbfleisch, M. L., & Iguchi, C. M. (2008). Twice-exceptional learners. In J. A. Plucker & C. M. Callahan (Eds.), *Critical issues and practices in gifted education: What the research says* (pp. 707–719). Prufrock Press.
- Kauffman, J. M., Simpson, R. L., & Mock, D. R. (2009). Problems related to underservice: A rejoinder. *Behavioral Disorders*, 34(3), 172–180. <https://doi.org/10.1177/019874290903400306>

- Kranjec, E., & Bakračević, K. (2023). Differences in self-regulated learning between gifted students, students with special needs and other students in Slovenian schools. *International Journal of Instruction*, 16(3), 505-518. <https://doi.org/10.29333/iji.2023.16327a>
- Lep, B. (2012). Dvojno izjemni otroci-nadarjeni učenci s specifičnimi učnimi težavami. In T. Bezić (Ed.), *Vzgojno izobraževalno delo z nadarjenimi učenci osnovne šole: Priročnik* (pp. 67–80). Zavod Republike Slovenije za šolstvo.
- Magajna, L. (2007). Prepoznavanje in razumevanje nadarjenih učencev s specifičnimi motnjami učenja. In M. Kavkler & M. Košak Babuder (Eds.), *Učenci s specifičnimi učnimi težavami: Skriti primanjkljaji-skriti zakladi* (pp. 167–180). Društvo Bravodruštvo za pomoč otrokom in mladostnikom s specifičnimi učnimi težavami.
- Martin, L. T., Burns, R. M., & Schonlau, M. (2010). Mental disorders among gifted and nongifted youth: A selected review of the epidemiologic literature. *Gifted Child Quarterly*, 54(1), 31–41. <https://doi.org/10.1177/0016986209352684>
- McFadden, J. (2017). Identifying and supporting twice-exceptional students with autism spectrum disorder (ASD). *Journal of Educational Leadership in Action*, 4(2). <https://digitalcommons.lindenwood.edu/cgi/viewcontent.cgi?article=1055&context=ela>
- Morrison, W. F. (2001). Emotional/behavioral disabilities and gifted and talented behaviors: Paradoxical or semantic differences in characteristics? *Psychology in the Schools*, 38(5), 425–431. <https://doi.org/10.1002/pits.1031>
- Morrison, W. F., & Rizza, M. G. (2007). Creating a toolkit for identifying twice-exceptional students. *Journal for the Education of the Gifted*, 31(1), 57–76. <http://search.ebscohost.com.tamtu.idm.oclc.org/login.aspx?direct=true&db=eric&AN=EJ777788&scope=si>
- Neihart, M. (2008). Identifying and providing services to twice-exceptional children. *Journal for the Education of the Gifted*, 31(1), 93–112. https://doi.org/10.1007/978-3-319-77004-8_20
- Neumann, L. C. (2004). Accommodating 2e students. *Twice-Exceptional Newsletter*, 7(1), 9–13. https://2ecenter.org/wp-content/uploads/2018/09/2e_Newsletter_Issue_7.pdf
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (7th ed.). McGraw-Hill Education.
- Reid, B. D., & McGuire, M. D. (1995). Square pegs in round holes--These kids don't fit: High ability students with behavioral problems. *Research-Based Decision Making Series*. <https://doi.org/10.4324/9781003234173>
- Reis, S. M., Baum, S. M., & Burke, E. (2014). An operational definition of twice-exceptional learners: Implications and applications. *Gifted Child Quarterly*, 58(3), 217–230. <https://doi.org/10.1177/0016986214534976>

Reis, S. M., & McCoach, D. B. (2000). The underachievement of gifted students: What do we know and where do we go? *Gifted Child Quarterly*, 44(3), 152–170. <https://doi.org/10.1177/001698620004400302>

Rizza, M. G., & Morrison, W. F. (2003). Uncovering stereotypes and identifying characteristics of gifted students and students with emotional/behavioral disabilities. *Roeper Review*, 25(2), 73–77. <https://doi.org/10.1080/02783190309554202>

Trail, B. A. (2022). *Twice-exceptional gifted children: Understanding, teaching, and counseling gifted students*. Routledge.