

Self-esteem as a mediator between perfectionism and impostor syndrome among gifted students

Dimitrovska, Jasna ✉

Internacional Slavic University, St. Nikolas, Republic of Macedonia (dzasnicka@gmail.com)

Popovska Nalevska, Gorica

Internacional Slavic University, St. Nikolas, Republic of Macedonia (popovska.g@gmail.com)



ISSN: 2243-7703
Online ISSN: 2243-7711

OPEN ACCESS

Received: 9 September 2024

Revised: 16 September 2024

Accepted: 30 September 2024

Available Online: 30 September 2024

DOI: 10.5861/ijrse.2024.24112

Abstract

In the socio-emotional development of the gifted, we can talk about some internal and external (endogenous and exogenous) characteristics of development. One of the intrinsic characteristics of development is that it is often uneven or asynchronous. In certain cases, their cognitive development greatly exceeds their affective development. The purpose of this study is to measure the prevalence of perfectionism, self-esteem and impostor syndrome and their connection among gifted students. Self-esteem assessment scales, positive and negative perfectionism and impostor syndrome were used for this purpose. The research sample is suitable and consists of 36 identified gifted students from secondary schools in the Republic of North Macedonia. The obtained results provide insights into the complex interaction between perfectionism, self-esteem and the impostor syndrome in gifted students. Results highlight the significant role of self-esteem as a mediator in the relationship between perfectionism and impostor syndrome.

Keywords: gifted students, perfectionism, self-esteem, impostor syndrome, secondary schools

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1. Introduction

Giftedness, defined as asynchronous development and a phenomenological approach, focuses on the inner world of gifted children and emphasizes their vulnerability in society. Asynchrony implies uneven development of the main dimensions of the personality such as: cognition, emotions, physical and social development. It is not uncommon for a gifted child to have exceptional potential in one field, while his other abilities are average. Gifted children differ from one another, and their development is also known to be uneven. Considering that not only cognitive or intellectual factors are important for giftedness, but also socio-emotional aspects of development, it is necessary to pay greater attention to this area as well. The very fact that they are "different", gifted individuals can encounter certain socio-emotional problems, which can become very serious.

Gifted children have certain common socio-emotional traits, including: increased sensitivity, emotional intensity and reactivity, sense of difference, perfectionism, and uneven development of intellectual and emotional domains. Some of these social and emotional traits may take the form of particular vulnerability for gifted children. For example, gifted children may have difficulty coping with their high sensitivity, coping with differences in intellectual, emotional, and social development, and finding peers who truly understand and appreciate their unusual and advanced perceptions. There are five traits common to gifted children that result in social and emotional vulnerability: divergent thinking, excitability, sensitivity, intellectuality and perfectionism. Although traits appear to be integral to giftedness, their behavioral manifestations may vary depending on physiological factors such as tolerance for ambiguity, age, degree of introversion/extroversion, locus of control, etc. (Popovska Nalevska et al., 2023).

An often mentioned characteristic of the gifted is the so called multi potentiality (Silverman, 1999), meaning success in many different fields. Being successful in many different areas is very difficult and requires a lot of time and dedication to each one distinctly. Because of this characteristic, gifted children may have a problem with profession or career choice. Multipotentiality can become a major problem in the socio-emotional development of gifted children and is often a source of stress and various emotional problems. The external characteristics of the socio-emotional development of gifted children are related to the culture, society, norms and expectations of the specific environment in which they live. Possible causes of affective problems among gifted students can be classified into three groups:

Environmental issues - related to school and educational processes. Lack of a sufficiently challenging and interesting curriculum often causes boredom, hostility, and dissatisfaction among gifted children. Problems occur when mediocrity is valued and recognized in the school system, and deviations from excellence are not recognized or ignored.

Interpersonal problems - occur when peers, parents, and families perceive gifted children as "other people". To feel accepted, gifted people often reject or fail at their potential. Problems can also arise due to unrealistic expectations regarding the achievements and behavior of gifted children, from parents, guardians and other adults.

Interpersonal problems - related to self-esteem, self-respect, self-esteem and self-acceptance. The development of these concepts can lead either to healthy, appropriate coping strategies or to dysfunctional, maladaptive ones.

Self-image and self-esteem among gifted children - Self-esteem is "a favorable or unfavorable attitude toward oneself" (Rosenberg, 1965). It is the "evaluative component of the self-concept" (Chiu, 1988). This affective dimension could be considered as the final conclusion of the self-evaluation process: I like myself, I am satisfied

with myself, I am worthy, or I do not love myself, I feel dissatisfied, I am not worthy. It is closely related to how our close ones treat us and the triumphs or successes achieved in life; for example, it appears to be the result, partly of good school achievement (Baumeister et al., 2003). Rosenberg was one of the first authors to propose assessment using a holistic approach rather than based on specific abilities or qualities as suggested by other models. The Rosenberg Self-Esteem Scale is one of the most broadly used instruments for measuring a person's general attitude toward their importance or worth, their general feelings about themselves, and is considered one of the best measures of self-esteem.

During childhood, self-esteem is positively related to academic performance, negatively to depression thus predicts anxiety. During elementary school, there appears to be a bidirectional relationship between self-esteem and subjective well-being at school. However, in adolescence it is really crucial, considering that the development of identity is greatly influenced by relationships with others. Adolescents with high self-confidence are cooperative, work better in teams, experience jealousy-loneliness to a lesser degree, show high stress tolerance, high self-demand and persistence, high intelligence and social inclusion (Perez et al., 2016). High achieving adolescents and those identified as gifted and talented often identify their self-esteem with their achievements (Mofield & Parker, 2015). Researchers suggest that as these individuals transition into young adulthood, their self-esteem may be threatened when they fail to achieve the rate of performance they are used to, compared to their peers, or when they fail to meet the expectations of their families. Indeed, several studies show that some more common undergraduate students have perfectionist tendencies with family and cultural backgrounds that may further contribute to the development of negative self-esteem (Closson & Boutilier, 2017).

Lane (2015) postulated that perfectionism, lack of self-affirmation, and different motivational states (i.e. increased and decreased motivation) contributed to deceitful feelings in their sample of undergraduates, most of whom were white women. The desire to be flawless can contribute to feelings of inadequacy among individuals, especially in highly selective or competitive environments. Lane called for more quantitative examination of the experience of cheaters among rising adults. Self-esteem problems clearly underlie the cheater phenomenon, yet empirical studies examining the link between the cheater phenomenon and self-esteem level (i.e. whether self-esteem is high or low) have yielded somewhat mixed results. Most studies have found cheating phenomenon to be associated with low self-esteem, but the strength of the association reported in these studies has varied, with correlations ranging from strong to moderately strong (Caselman et al., 2006). Other studies have found that the cheater phenomenon and self-esteem levels are not related. (Topping, 1983).

Perfectionism and giftedness - It is really difficult to answer the question of when the pursuit of perfection becomes a problem, whether it is healthy to strive for perfection and where is the limit when this pursuit becomes dangerous to our health. When we are talking about a child of average ability, then the answer is somewhat easy – it is potentially dangerous when the child's goals are unrealistically high. However, when it comes to a gifted child, the question arises, how do we determine what is an unrealistically high goal for him? Many studies show that perfectionism is common among gifted children. Although it has not been empirically confirmed that gifted students experience perfectionism more than non-gifted populations, the literature indicates that perfectionism is present among many gifted students (Roberts & Lovett, 1994; Schuler, 2000).

Perfectionism has been explored among gifted students in several studies over the past decade. Schuler (2000) explored perfectionism among gifted adolescents through a mixed-method research study. The results showed that 58% of the respondents were positive perfectionists while 29.5% of the students were unhealthy perfectionists i.e. 87.5% of the gifted students showed perfectionism. Positive perfectionists showed order and organization, a desire to “achieve their ‘personal best’” from childhood, and worked harder to alleviate the frustrations of making mistakes. On contrary, neurotic perfectionists were highly concerned about making mistakes, experienced high levels of anxiety, believed that their perfectionism was a personality trait, and were more eager to please others than to achieve their personal best. Empirical knowledge of perfectionism and its relation to the gifted population is limited at best. Positive and negative perfectionism have been investigated among Chinese gifted students in Hong Kong (Chan, 2007). The Positive and Negative Perfectionism Scale (PNPS –12) was used to measure

positive perfectionism (the realistic pursuit of excellence) and negative perfectionism (the rigid adherence to perfection and preoccupation with avoiding mistakes). The PNPS-12 was also used to determine the relationships between perfectionism, self-efficacy, and subjective well-being. The results confirmed both empirically differentiated forms of perfectionism (positive and negative) in a wide range of gifted students (from 2nd to 12th grade). Multiple regression analysis revealed that positive perfectionism predicts life satisfaction and positive affect while negative perfectionism predicts negative affect. These findings support the idea that perfectionism should not be eliminated; rather, positive perfectionism (the realistic striving for excellence) should be strengthened by enhancing students' general self-efficacy (Chan, 2007).

Some studies suggest that these children are highly motivated, well-adjusted, socially mature, open to new experiences, independent, and possess high self-concepts and high tolerance (Neihart, 2016). Despite this, there are still misconceptions that gifted children are predisposed to develop perfectionism, which will then lead to various adjustment problems such as depression, suicide and eating disorders. Contrary to this belief, there are studies that prove that tendency towards perfectionism, among gifted children, will stimulate healthy and positive need, that is, motivation for achievement, rather than maladaptive behavior (Flett & Hewitt, 2002). That certainly does not mean that perfectionism is not a problem for a certain number of children.

Impostor syndrome and giftedness - Impostor phenomenon is characterized as difficulty internalizing success due to experiencing a sense of falsehood, inauthenticity, or falsity, regardless of and/or despite evidence of ability and/or achievement (Matthews & Clance, 1985). The authors describe impostor syndrome as an "internal experience of intellectual deception" (the person pretending to be something they are not), due to the inability to internalize success. Despite any external evidence to the contrary (academic achievement, advanced degrees, professional accomplishments), individuals with Impostor phenomenon believe that they have somehow deceived others regarding their intellect and work to prevent others from discovering their alleged lack of competence. When a person has to perform a task, symptoms of anxiety appear, to which the person additionally reacts either with initial procrastination and panic preparation or excessive preparation. After positive task feedback, these individuals reject the praise and deny the connection between their success and ability. They believe that they successfully completed the task either because of excessive preparation, which they believe is not a reflection of their abilities, or that they were lucky if they initially procrastinated. Such beliefs reinforce the above fears and the cycle repeats itself. People experiencing impostor syndrome deny credit and praise for their successes through self-affirmation theory. In that theory, it is presented that all people interacting with the environment tend to confirm their beliefs about themselves, regardless of their valence. (Swann & Buchmester, 2012).

The three key assumptions of self-affirmation theory are:

- When life patterns are established and maintained over a period of time, people consolidate them by developing a stable self-perception.
- These self-perceptions provide people with a strong sense of coherence.
- Feelings of coherence are so appealing that people will struggle to maintain them, even when it means enduring pain and discomfort.

People receive a lot of information from the environment from which they create beliefs about themselves and the world. Through self-beliefs, people perceive reality and give it meaning. If a person's fundamental beliefs were to be shaken, it would challenge every perception of himself and the world around him. It is therefore important that people maintain this coherent self-image. Studies have revealed internal and external factors related to the impostor phenomenon including how attributional styles and perceived competence are related to internalizing success or failures (Thompson et al., 1998; Vaughn et al., 2020). Attributes refer to an individual's perception of the causes of outcomes, and attribution styles describe how individuals explain significant events in their lives. Attribution styles can be gender-related or immediate environments related to the college experience. Also, Lane (2015) uncovered internal and external factors that contribute to the impostor phenomenon. Internal factors include high motivation, perfectionism, and inability to self-validate. External factors included constant comparison with

the performance or perceived abilities of others and evaluation at school. For example, time periods designated for exams (e.g. final exams, standardized testing) may influence the experience of the impostor phenomenon by conveying the fear of not achieving at a level comparable to their peers. Since the impostor phenomenon is experienced by individuals who achieve success even though they do not believe they are capable, it is important to understand how internal and external factors, such as perfectionism and participation in academic and socially competitive environments, contribute to the development of feelings of being impostor.

2. Research methodology

Research objectives and tasks - The general aim of this study is to measure the degree of representation of perfectionism, self-esteem and impostor syndrome among gifted students. The realization of this goal is done through the realization of the following tasks:

- Examining the degree of self-esteem of gifted students;
- Examining the degree of positive or negative perfectionism among gifted students;
- Examination the degree of the impostor syndrome among gifted students;
- Examining the relationship between self-esteem, perfectionism and impostor syndrome among gifted students.

Research sample - The research sample is suitable and consists of 36 gifted students from secondary schools in the Republic of North Macedonia, who were previously identified as gifted and talented by the professional pedagogical - psychological service in schools, according to established criteria for identifying gifted and talented students within the framework of education in the Republic of North Macedonia. As the survey covers a sample of 15 to 18-year-old students, regulatory requirements that ensure protection for child research participants must be considered. According to these regulations, children are persons who have not reached the age limit for consent according to the law of the jurisdiction in which the research was conducted (in the Republic of North Macedonia, any person under the age of 18). Consent for the child to participate in the research was made by obtaining written consent from the child's parents or legal guardians.

Research techniques and instruments - In accordance with the set goals, three assessment scales were used:

Rosenberg self-esteem scale (RSES) - the scale consists of 10 items evaluated on a 4-point Likert scale from 1 (strongly disagree) to 4 (strongly agree). Scores vary from 10 to 40, with higher scores indicating a more positive self-esteem appraisal. To measure the reverse score, five questions are worded positively (items 1, 3, 4, 7, and 10), while five are worded negatively (items 2, 5, 6, 8, and 9). The validity and reliability evidence of the RSES were assessed in prior studies (Meng & Shing, 2018). Concerning the evaluation of construct validity, prior studies have demonstrated that the RSES yielded an excellent model fit.

The Positive and Negative Perfectionism Scale (PANPS) is a 40-item self-report inventory to assess the levels of positive and negative perfectionism. Respondents are asked to complete the questionnaire using a 5-point response format, indicating for each item either "strongly agree" (scored 5), "agree" (scored 4), "don't know" (scored 3), "disagree" (scored 2), or "strongly disagree" (scored 1). Scores for positive perfectionism and negative perfectionism, each with 20 questions, can range from 20 to 100, with higher values indicating greater positive and negative perfectionism, respectively (Terry-Short et al., 1995).

The Clance Impostor Phenomenon Scale (CIPS; Clance, 1985) is considered the most widely used instrument for measuring impostor expression. The CIPS, a 5-point scale with response options ranging from 5 (strongly agree) to 1 (strongly disagree), whose validity and reliability is very high and assesses three constructs: fear of failure, attribution of success to luck and devaluation of success. Final scores are formed by simply adding the numbers in the item responses. If the score is equal to or less than 40, then the subject has very few characteristics of the impostor syndrome. If the total score is from 41 to 60, it indicates moderate features of impostor syndrome. If the total score is from 61 to 80, then it indicates frequent features of the impostor syndrome (Clance, 1985).

A clinical psychologist, a school psychologist and a pedagogue evaluated the items from the three scales to determine their content validity adapted to the Macedonian language. Validation was also conducted by pretesting 20 students to ensure that all items were understandable, culturally relevant, and did not cause confusion or misunderstanding.

Data processing - The data were processed quantitatively using the EXCEL and STATISTICS computer programs. They were grouped according to the number of matching in certain categories and then placed into tables. The data were calculated with frequencies for which a percentage was calculated

Limitations of the Study - A suitable sample was used in the research, as it considered the relatively small representation of identified gifted students in relation to the total population of students. When using a suitable sample, it is important to consider its limitations, as it is not acceptable to generalize the results to larger populations, but the findings should be interpreted in the specific context of the study. Another limitation is that the respondents were not identified as gifted by the researchers, but were only offered as previously identified by the professional services in the schools where the research was conducted. The research provides insights into the complex interaction between perfectionism, self-esteem, and impostor syndrome among gifted students, highlighting the significant role of self-esteem as a mediator in the relationship between perfectionism and impostor syndrome. The results should contribute to developing programs focused on building resilience, promoting the importance of mental health and creating a supportive environment among these students could be particularly beneficial.

3. Result and discussion

Self-esteem among gifted students - The first task of the research is to determine the degree of representation of self-esteem among gifted students. For this purpose, a group test was performed on the students included in the research sample who were given the task of filling out Rosenberg self-esteem scale. Rosenberg was one of the first authors to propose assessment using a holistic approach rather than based on specific abilities or qualities as suggested by other models. The Rosenberg Self-Esteem Scale is one of the most broadly used instruments for measuring a person's general attitude toward their importance or worth, their general feelings about themselves, and is considered one of the best measures of self-esteem. A total of 36 students completed the scale. Scores vary from 10 to 40, with higher scores indicating a more positive self-esteem appraisal. After processing the individual results for each student, Table 1(a, b) presents the obtained results for each statement from the scale expressed by frequency of students. The highest frequency shown in the tabular presentation of the self-esteem scale, processed according to the sum of the individual items, indicates a high level of self-esteem among gifted students and their positive self-image. Five questions are worded positively (items 1, 3, 4, 7, and 10) presented in Tabela 1a, while five are worded negatively (items 2, 5, 6, 8, and 9) presented in Table 1a.

Table 1a
Degree of self-confidence among gifted students expressed in frequency (f)

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
1. In overall, I am satisfied with myself.	4	9	13	10	36
3. I feel that I have number of good qualities.	7	9	16	4	36
4. I am able to do things as well as most other people.		2	22	12	36
7. I feel that I am a person of worth.	3	3	20	10	36
10. I take a positive attitude toward myself.	8	11	14	3	36
Total	22	34	85	39	

According to the results in Table 1a most of the students responded with “agree“ or “strongly agree“ to the positive statements, which shows a representation of a high level of self-esteem.

Low self-esteem responses are “agree” or “strongly agree” on items 2, 5, 6, 8 and 9 worded negatively. Most of the students “disagree” with these statements. According to the results in Table 1 (a, b) most of the students shows a representation of a high level of self-esteem.

Table 1b*Degree of self-confidence among gifted students expressed in frequency (f)*

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Total
2. At times I think I am no good at all.	14	5	17		36
5. I feel I do not have much to be proud of.	10	17	6	3	36
6. I certainly feel useless at time.	10	17	7	2	36
8. I wish I could have more respect for myself.	2	18	4	20	36
9. All in all, I am inclined to think that I am a failure.	5	20	11		36
Total	41	77	45	25	

Perfectionism among gifted students - The second task of the research is to determine the degree of perfectionism among gifted students. Perfectionism among students was measured with The Positive and Negative Perfectionism Scale. Tables 2 and 3 present the results obtained in relation to positive and negative perfectionism among gifted students. The scale has individual items from 1 completely disagree to 5 completely agree. Results are displayed in two subscales whose items are divided appropriately for each of the subscales of the scale for positive and negative perfectionism.

Table 2*Results for positive perfectionism among gifted students expressed in frequency (f)*

Statement	Strongly Disagree	Disagree	Not sure	Agree	Strongly agree	Total
2. My family and friends are proud of me when I do really well.	1	1	4	10	20	36
3. I take pride in being meticulous when doing things.	1	4	2	15	14	36
6. I like the acclaim I get for an outstanding performance.		1	8	14	13	36
9. Producing a perfect performance is a reward in its own right.	2	1	3	14	16	36
14. Other people respect me for my achievements.	5	13	7	6	5	36
16. I think everyone loves a winner.	4	11	13	3	5	36
18. When I'm competing against others, I'm motivated by wanting to be the best.	3	3	6	12	12	36
19. I feel good when pushing out the limits.		1	1	21	13	36
21. My high standards are admired by others.	3	7	12	8	6	36
23. I like to please other people by being successful.	5	2	14	11	4	36
24. I gain great approval from others by the quality of my accomplishments.		6	9	16	5	36
25. My successes spur me on to greater achievements.		1	4	14	8	36
28. I believe that rigorous practice makes for perfection.		4	14	13	5	36
29. I enjoy the glory gained by successes.		6	5	13	12	36
30. I gain deep satisfaction when I have perfected something.			3	17	16	36
32. My parents encouraged me to excel.	2	4	8	10	12	36
34. I get fulfilment from totally dedicating myself to a task.			7	12	17	36
35. I like it when others recognized that what I do requires great skill and effort to perfect.			1	19	16	36
37. I enjoy working towards greater levels of precision and accuracy.		2	7	12	15	36
40. I like the challenge of setting very high standards for myself.	1	7	10	11	7	36
Total	27	74	138	250	231	

The results in table 2 show that most of the gifted students included in the research opted for a 4th (agree) or 5th (strongly agree) degree of assertion, indicating highly expressed positive perfectionism.

Table 3*Results for negative perfectionism among gifted students expressed in frequency (f)*

Statement	Strongly Disagree	Disagree	Not sure	Agree	Strongly agree	Total
1. When I start something I feel anxious that I might fail.	5	6	11	12	2	36
4. I set impossibly high standards for myself.	3	6	13	6	6	36
5. I try to avoid the disapproval of others at all costs.		6	12	14	4	36
7. When I am doing something I cannot relax until it's perfect.	1	8	6	9	12	36
8. It feels as though my best is never good enough for other people.	5	13	8	6	4	36
10. The problem of success is that I must work even harder.	1	3	10	13	9	36
11. If I make a mistake I feel that the whole thing is ruined.	5	8	13	4	6	36
12. I feel dissatisfied with myself unless I am working towards a higher standard all the time.	2	5	15	9	5	36
13. I know the kind of person I ought or want to be, but feel I always fall short of this.	5	6	6	11	8	36
15. As a child however well I performed, it never seemed good enough to please my parents.	17	7	5	4	3	36
17. Other people expect nothing less than perfection of me.	6	10	12	3	5	36
20. When I achieve my goal I feel dissatisfied.	12	13	7	3	1	36
22. If I fail people, I fear they will cease to respect or care for me.	4	8	6	13	5	36
26. I feel guilty or ashamed if I do less than perfectly.	5	8	8	12	3	36
27. No matter how well I do I never feel satisfied with my performance.	8	6	15	3	4	36
31. I feel I have to be perfect to gain people's approval.	5	11	12	4	4	36
33. I worry what others think if I make mistakes.	9	3	7	12	5	36
36. The better I do, the better I am expected to do by others.		5	10	11	10	36
38. I would rather not start something than risk doing it less than perfectly.	6	12	12	3	3	36
39. When I do things I feel others will judge critically the standard of my work.	2	6	20	6	2	36
Total	101	150	208	158	101	

Regarding to obtained results from the measurement of negative perfectionism, most of the students have an undetermined attitude regarding the representation of negative perfectionism. We can also notice that summing up the results of the first two degrees (strongly disagree and disagree) which indicate a low degree of negative perfectionism and the last 2 degrees (agree and strongly agree) which show a high degree of negative perfectionism an approximate representation by frequency of students was obtained.

Impostor syndrome among gifted students - Table 4 presents the results of measuring the prevalence of impostor syndrome in gifted students using The Clance Impostor Phenomenon Scale.

A total of 36 students completed the scale. After taking the scale, add together the numbers of the responses to each statement. If the total score is 40 or less, the respondent has few Impostor characteristics; if the score is between 41 and 60, the respondent has moderate experiences; a score between 61 and 80 means the respondent frequently has Impostor feelings; and a score higher than 80 means the respondent often has intense experiences. The higher the score, the more frequently and seriously the Impostor Phenomenon interferes in a person's life.

After processing the individual score for each student, in Table 4 we presents the obtained results for each statement from the scale expressed by frequency of students. The obtained results show that most of the students

chose degrees 3 “sometimes“, then 4 “agree“ and 5 “completely agree”. Summarizing the answers to degrees 4 and 5, it is shown that most of students strongly experience the impostor syndrome. Table 5 shows a comparative analysis of the results of the three variables: self-image, perfectionism (positive and negative) and the impostor syndrome among the gifted and students included in the research.

Table 4

Results of experiencing impostor syndrome among gifted students expressed in (f)

Statement	Not at all	Rarely	Sometimes	Often	True	Total
1. I have often succeeded on a test or task even though I was afraid that I would not do well before I undertook the task.	1	3	3	15	4	36
2. I can give the impression that I'm more competent than I really am.	1	4	15	10	6	36
3. I avoid evaluations if possible and have a dread of others evaluating me.	3	10	8	7	8	36
4. When people praise me for something I've accomplished, I'm afraid I won't be able to live up to their expectations of me in the future.	8	5	7	8	8	36
5. I sometimes think I obtained my present position or gained my present success because I happened to be in the right place at the right time or knew the right people.	8	3	6	12	7	36
6. I'm afraid people who are important to me may find out that I'm not as capable as they think I am.	11	8	4	8	5	36
7. I tend to remember the incidents in which I have not done my best more than those times I have done my best.	4	4	10	12	6	36
8. I rarely do a project or task as well as I'd like to do it.	7	8	12	4	5	36
9. Sometimes I feel or believe that my success in my life or in my job has been the result of some kind of error.	12	5	8	3	8	36
10. It's hard for me to accept compliments or praise about my intelligence or accomplishments.	5	6	13	6	6	36
11. At times, I feel my success has been due to some kind of luck.	8	7	10	6	5	36
12. I'm disappointed at times in my present accomplishments and think I should have accomplished much more.	2	5	7	16	6	36
13. Sometimes I'm afraid others will discover how much knowledge or ability I really lack.	10	2	12	8	4	36
14. I'm often afraid that I may fail at a new assignment or undertaking even though I generally do well at what I attempt.	3	6	11	12	4	36
15. When I've succeeded at something and received recognition for my accomplishments, I have doubts that I can keep on with success.	4	4	12	12	4	36
16. If I receive a great deal of praise and recognition for something I've accomplished, I tend to lower the importance of what I've done.	6	6	12	5	7	36
17. I often compare my ability to those around me and think they may be more intelligent than I am.	7	7	7	5	10	36
18. I often worry about not succeeding with a project or examination, even though others around me have considerable confidence that I will do well.	7	7	6	7	9	36
19. If I'm going to receive a promotion or gain recognition of some kind, I hesitate to tell others until it is an accomplished fact.	3	2	10	8	13	36
20. I feel bad and discouraged if I'm not “the best” or at least “very special” in situations that involve achievement.	6	7	10	5	8	36
Total	116	109	183	169	143	

In order to check the research hypothesis that gifted students who have high self-esteem also have high levels of perfectionism, we compare the average scores of those students who showed high self-esteem, that is, an average score between 3 and 4 for self-esteem and 4 and 5 for perfectionism. Nine students (1,5,7,13,18,21,23,24,29) with a high positive self-esteem also showed highly expressed positive perfectionism and a lower perception of the impostor syndrome. Ten students showed a high experience of the impostor syndrome i.e. an average score above 3.5 (4,7,8,9,10,16,26,27,31,33). Compared to the average self-esteem score, these students show lower self-esteem. These results confirm that among gifted students, who had higher self-esteem, we also had a lower experience of impostor syndrome. Compared to the average rating for the degree of self-confidence, these students show lower

self-confidence. These results confirm that among the examined gifted students who have a higher self-esteem, we have a lower experience of the impostor syndrome. Research shows that higher levels of self-esteem can moderate the negative effects of perfectionism, reducing the likelihood of impostor syndrome. Research shows that gifted students often show high levels of perfectionism, which can be a strong motivator but also a source of stress regardless of whether it manifests itself as adaptive or maladaptive. Research shows that impostor syndrome is prevalent among gifted and talented students. The pressure to meet high expectations can exacerbate feelings of inadequacy.

Table 5

Comparative presentation of self-image, perfectionism (positive and negative) and impostor syndrome expressed through an arithmetic medium (average score)

Students	Self-Esteem	Positive Perfectionism	Negative Perfectionism	Impostor Syndrome
Student 1	3.1	3.9	2.9	3.1
Student 2	2.6	3.2	2.6	2.7
Student 3	2.7	3.8	2.9	3.3
Student 4	1.4	3.5	2.8	4.1
Student 5	3.1	3.8	2.4	2.2
Student 6	2.8	3.4	3.2	2
Student 7	3	3.3	2.8	3.5
Student 8	2.7	3.4	3.5	4.3
Student 9	2.9	3.2	2.9	3.5
Student 10	2.2	3.5	3.5	4.2
Student 11	2.5	3.8	3	1.9
Student 12	2.4	3.7	2.8	3.4
Student 13	3.1	3.4	2.3	2.9
Student 14	2.7	3.4	2.3	3.1
Student 15	2.9	3.8	4.1	3.4
Student 16	2.1	4.2	3.6	3.6
Student 17	2.8	3.7	3.1	3.1
Student 18	3	3.4	2.4	3.2
Student 19	2.8	4.6	4	1.8
Student 20	2.9	3.3	3.4	2.8
Student 21	3.1	3.7	3.1	3
Student 22	2.3	3.8	2.9	4
Student 23	3.2	2.9	1.5	2.8
Student 24	3.3	4.2	2.4	2.8
Student 25	2.4	4.7	3.3	2.4
Student 26	2.9	3.8	4.3	3.8
Student 27	2.9	4.3	3	4.1
Student 28	2.7	4	3	2.9
Student 29	3.2	4.4	3.4	2.3
Student 30	2.2	5	2.7	3.4
Student 31	2.2	3.6	3.1	4.5
Student 32	2.8	4.2	3.4	2.2
Student 33	2.7	4.4	3.1	4.2
Student 34	2.8	3.9	2.4	2.8
Student 35	2.6	3.8	2.3	3.2
Student 36	2.5	4	2.9	2.3
Total	2.7	4.8	2.9	3

4. Conclusion and Recommendations

Interventions aimed at increasing the self-esteem of gifted students could be effective in mitigating the negative impacts of perfectionism and reducing the occurrence of the impostor syndrome. Gifted children have specific needs, and if they are not met and treated professionally, they can lead to several problems. The most common reasons for counseling work with gifted children relate to: uneven development (disharmonious and asynchronous), personal relationships, excessive self-criticism, perfectionism, avoidance of risk-taking, etc. Counseling work with gifted students is of great importance, primarily because of the positive effects on their emotional and social development and support in guiding them to find their way in education that will recognize and strengthen their abilities. Programs focused on building resilience, promoting the importance of mental health,

and creating a supportive environment among these students could be particularly helpful. The care and support of adults can help these children develop their talents while overcoming various adaptive challenges and stressful situations.

Implications and suggestions for further research - Further research is recommended to examine additional mediating factors that may influence the relationship between perfectionism and obsessive compulsive disorder. Longitudinal studies could also provide deeper insights into how these dynamics develop over time and influence long-term outcomes among gifted and talented individuals. By emphasizing the importance of addressing the socio-emotional needs of gifted and talented students. By understanding and supporting their self-esteem, educators and mental health professionals can help students overcome the challenges of perfectionism and impostor syndrome by improving their well-being and enabling them to reach their full potential.

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