



Essay

Comparing Perfectionism, Cognitive Mindset, Constructive Thinking, and Emotional Intelligence in Gifted Students by Grade and Gender

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Abstract: The study compared the differences among gifted students of different grades and genders concerning perfectionism, cognitive mindset, constructive thinking, and emotional intelligence. The study included 908 gifted primary-school students from third to sixth grade. The study used the *t*-test and analysis of variance methods, and four scales. Furthermore, the following were the conclusions. Firstly, gifted pupils of different grades and genders scored considerably differently on some perfectionism subscales. Second, there were notable differences in the cognitive mindset of gifted pupils in different grades. Lastly, there was a substantial difference between gifted pupils in different grades in the distrust-of-others subscale in the constructive-thinking scale. Finally, there was a substantial difference in introversion, interpersonal relationships, and mood among gifted students of different genders.

Keywords: perfectionism; cognitive mindset; constructive thinking; emotional intelligence; gifted students



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1. Introduction

The majority of parents in Taiwan consistently expect their children to behave well, perform well in school, and achieve great things in the future. Students who implicitly comprehend the self-worth measured by competence in this achievement-oriented environment may strive to be the best (Mofield and Peters 2018). They might hold the idea that if they succeed or are perfect, it means that they have been valued. The thoughts of a perfectionist might reinforce the beliefs about ability (beliefs about whether the ability is malleable vs. static). If pupils' great abilities are demonstrated, they further solidify their idea that their intelligence and talent are fixed. Many gifted students have good cognitive abilities and quickly achieve high educational performance. Therefore, they execute their idealized plan in order to achieve the best performance and win the respect, and be identified by their parents and teachers. Due to this, gifted students experience greater pressure from their parents, instructors, and their own expectations than average students do. Boys feel more pressure from their parents if they are given more attention than girls.

Perfectionism has long been recognized as a psychological factor that can enhance or interfere with the healthy adjustment of young students who are academically gifted (Grugan et al. 2021). Most studies conclude that perfectionism has both advantages and disadvantages (Silverman 1999). According to Hamachek (1978), perfectionism should be classified into two types, normal perfectionism and neurotic perfectionism, and considered in a continuous form ranging from excellent to nervous. For example, positive perfectionism tends to lead to a healthy pursuit of high standards and being excellent, whereas maladaptive perfectionism results in anxiety and unsatisfactory results. Mofield and Peters (2018) confirmed that the perfectionism of gifted students is related to the various concepts of adaptive results (Mofield and Peters 2018). Accordingly, there is growing agreement that perfectionism is a multidimensional concept made up of two larger dimensions: perfectionism concerns and perfectionism strivings (Stricker et al. 2020).

Aspects of perfectionistic concerns have a negative impact on academic effectiveness, grade point average (GPA), life satisfaction, and happiness among gifted students (Stricker et al. 2020). However, aspects of perfectionistic strivings are connected to academic success, GPA, and life satisfaction in a favorable way (Stricker et al. 2020). According to the findings of a meta-analytic study, students who were intellectually gifted showed higher levels of perfectionistic striving but similar levels of perfectionistic concerns as compared to non-gifted students (Stricker et al. 2020). For students who are academically gifted, perfectionistic concerns (PC) are likely to be uniformly crippling, but perfectionistic strivings (PS) are linked to more inconsistent results (Grugan et al. 2021). Evidently, the perfectionist striving of gifted students may lead to greater test scores than non-gifted students and different outcomes. Moreover, gifted-individuals' perfectionism concerns have detrimental effects and are identical to those of non-gifted students.

According to Dweck, people's beliefs about the fixedness and malleability of their personal attributes, such as their intelligence, are expressed in their self-theories (Dweck and Molden 2005). Do people think that their intelligence is a fixed attribute or something that they can develop with study and effort? Self-theories can be described as either having a fixed mindset or a growth mindset. If gifted students experience a form of perfectionism that conceives of their abilities as outstanding, they might be afraid of failure, have a decreased tolerance for frustration, and even develop maladaptive behaviors. If they feel that their efforts improved their performance, they might have the courage to accept a challenge in order to achieve greater success. In contrast to gifted achievers, gifted underachievers in grades 6–8 demonstrated poorer levels of organization, self-regulation, and motivation, according to research by Mofield and Peters (2019). They also exhibited stronger fixed-mindset beliefs about intelligence (Mofield and Peters 2019). The fixed mindset of unhealthy perfectionists was significantly higher than healthy perfectionists and nonperfectionists, indicating that targeting mindset adjustment may be a feasible method for unhealthy perfectionists (Chan 2012). Additionally, for the whole sample of gifted students, fixed-mindset beliefs predicted both aspects of evaluative-concerns perfectionism (concern over mistakes and doubt of action), whereas growth-mindset beliefs predicted both aspects of positive-striving perfectionism (personal standards and organization) (Mofield and Peters (2019). Apparently, gifted students may convert maladaptive perfectionism into adaptive perfectionism if they have good coping skills or constructive thinking.

In addition to being directly associated with bad results, perfectionism has also been connected to the specific ways in which people try to deal with their daily issues and the resulting emotions of distress (Flett et al. 1994). Several forms of perfectionism were connected to either a positive or negative coping style. Constructive thinking is a method for resolving everyday issues and a procedure for easing the pressure that leads to subpar performance (Burns and Fedewa 2005). Poor constructive thinkers experienced the helplessness pattern noted by Dweck and her colleagues when faced with coping situations (Flett et al. 1994). The Constructive Thinking Inventory (CTI) offers several measures, such as summary scores for global constructive thinking, emotional coping, behavioral coping, categorical thinking, personal superstitious thinking, naive optimism, and esoteric thinking (Flett et al. 1994). According to Flett et al. (1994), socially prescribed perfectionism was linked to less constructive thinking and more negative coping on the majority of CTI subscales. These correlations remained even after adjusting for levels of depression symptoms. Self-oriented perfectionism was healthy in that it was linked to proactive behavioral coping strategies, but it was unhealthy in that it was linked to emotional coping strategies that involved lower levels of self-acceptance (Flett et al. 1994). It seems that whatever types of perfectionist gifted students there are, if they hold inappropriate perfectionism beliefs, they might have negative effects.

Most developmental theories have been specifically concerned with children and the scientific understanding of age-related changes in experience and behavior (Sharma n.d.). The analyses in Ogurlu (2020) also focused on the two moderators of perfectionism dimensions and grade level. In addition, gender is one of the first categories children learn, and

the categorization of people into men and women affects almost every aspect of our lives, especially our self-concept and our perceptions of others (Morgenroth and Ryan 2018). In psychology, age and gender are the vital factors that affect students' cognitive and mental changes. Therefore, the study aimed to investigate the differences in the perfectionism, cognitive mindset, constructed thinking, and emotional intelligence of primary gifted students by grade and gender.

2. Literature Review

Perfectionism, cognitive mindset, constructive thinking, and emotional intelligence were all subdivided by grade and gender in the study.

2.1. The Difference of Perfectionism by Grade and Gender

It is significant to note that several studies have revealed that gifted students do not exhibit greater levels of perfectionism than their average peers (LoCicero and Ashby 2000; Margot and Rinn 2016; Parker 2000; Parker and Mills 1996). However, it is commonly considered that many gifted children are academic perfectionists and have high personal standards for themselves, particularly in the classroom (Dixon et al. 2004; Margot and Rinn 2016; Parker and Adkins 1995; Speirs Neumeister 2007; Wang et al. 2012). When under pressure from their parents, peers, or teachers, gifted kids may act in a way they perceive to be "perfect." Other elements, such as a gifted student's gender, age or grade level, and birth order, may also have an effect on whether or not they are perfectionistic (Siegle and Schuler 2000). Even Portešová and Urbánek (2013) imply that the proportion of gifted students who are perfectionists is rising. The study analyzed perfectionism by gender and grade level.

Research that examines perfectionism in gifted people of all ages and grade levels is similarly contradictory (Margot and Rinn 2016). Some studies have concluded that age is positively associated with both general and specific dimensions of perfectionism, such as doubt about actions (Butt 2010). Other studies have reported a lack of significant associations between age and overall perfectionism scores (Schweitzer and Hamilton 2002). The fourth-grade gifted students obtained significantly higher grades than fifth-grade and sixth-grade students in perfectionism (Chen 1996). Fourth-grade students had higher scores on compulsiveness than other students and also have higher scores on the need for admiration than seventh and eighth graders (Uz Baş 2011). DeKryger (2005) found that increased age was associated with lower levels of the organization, goal orientation, and maladaptive striving in children (DeKryger 2005). However, no significant gender and age differences were observed in the dimension of perfectionism among children between the ages of 9 and 11 (Rice and Preusser 2002). Uz Baş (2011) found that there were no significant grade-level effects on the sensitivity to mistakes and contingent self-esteem of 9- to 15-year-old students (Uz Baş 2011). In comparing gifted primary and secondary pupils on measures of perfectionism, Chan (2007, 2009) did not find any statistically significant differences between the groups.

There is limited agreement regarding gender differences in perfectionism among gifted people (Sand et al. 2021). In Grades 2 through 12, gifted females rated themselves higher on positive perfectionism than boys (Chan 2007). Moreover, gifted boys were more likely than girls to be negative or unhealthy perfectionists (Chan 2009). Based on the dimension of perfectionism, girls' concerns about making mistakes increase from grade 6 to grade 8, while the pattern for boys fluctuates insignificantly (Siegle and Schuler 2000). However, Parker and Mills (1996) discovered that while gifted girls outperformed gifted boys in organization, gifted boys outperformed gifted girls in concern over mistakes. However, there was no statistically significant difference between gifted girls and gifted boys in terms of parental expectations (Parker and Mills 1996). Patterns of parental criticism varied between boys and girls from grade 6 through grade 8 (Siegle and Schuler 2000). Females reported higher levels of concern about organization than did males, and males endorsed higher levels of maladaptive striving than females (DeKryger 2005). Uz Baş (2011) found girls aged 9 to

15 years obtained higher grades than boys in sensitivity to mistakes, contingent self-esteem, and compulsiveness, and there was no significant gender effect on the need for admiration (Uz Baş 2011). In addition, Blankstein and Winkworth (2004) indicated that there were significant gender differences among university students concerning the relations between perfectionism dimensions, levels of attribution, and dysphoria (Blankstein and Winkworth 2004). However, there was no significance between boys and girls on subscale scores in perfectionism (Chen 1996), (Rice et al. 2004), or (Chan 2012). Tsui and Mazzocco (2007) also found no differences between sixth-grade, mathematically gifted boys, and mathematically gifted girls on perfectionism scores (Tsui and Mazzocco 2007). Important research on gender and grade level differences is unclear. In the study, gender and grade differences in perfectionism subscales were explored.

2.2. The Difference of Cognitive Mindset by Grade and Gender

A cognitive mindset refers to one's belief that either intelligence is a malleable trait that can improve with effort—a “growth” mindset—or is a relatively stable trait—a “fixed” mindset (Macnamara and Rupani 2017). A growth mindset is positively associated with age, such that older children tended to endorse more of the growth mindset (Schroder et al. 2017). Lee et al. (2022) classified fourth-grade students into three profiles based on mindset, including confident and fixed mindset, moderately confident and neutral mindset, and confident and growth mindset, and found that the confident-and-growth-mindset profile showed higher levels of behavioral and cognitive engagement than the moderately-confident-and-neutral-mindset profile in school English/Language Arts grade and vocabulary performance (Lee et al. 2022). Therefore, it is critical to offer encouragement for a growth mindset before upper elementary students adopt a fixed perspective.

Little is known about gifted students' mindsets and beliefs. Gifted students were more likely than general students to believe that intelligence is malleable, but there was significant variation in gifted-students' mindset beliefs (Esparza et al. 2014). A growth mindset is especially important for gifted students because they are at risk of underachievement and perfectionism, both of which can prevent them from achieving their full potential (Esparza et al. 2014). Dweck (2006, 2007) discovered that fixed-mindset messages are prevalent across the achievement spectrum and that high-achieving girls are particularly vulnerable to fixed-ability beliefs (Boaler 2013). Age, gender, and the intelligence-predicting mindset all showed three-way interactions; however, the connections were not always explained by the fact that smarter women (young or old) had more of a fixed mindset than their less intelligent female or male counterparts (Macnamara and Rupani 2017).

While most mindset research focuses on incremental belief-promoting interventions, little is known about how incremental and entity belief distributions change across age groups and domains (Goldhorn et al. 2021). Furthermore, Goldhorn et al. (2021) discovered a shift in mindset distribution across grades, indicating that physics instruction affected how students thought about the subject. Changing one's mindset necessitates the acquisition of related ideas. Some studies have found gender differences in implicit theories (Goldhorn et al. 2021). Girls were more likely to have a fixed mindset (Gunderson et al. 2013), and female students in particular believed that natural physics ability was required for success (Archer et al. 2020). According to Macnamara and Rupani (2017), neither gender nor IQ was reliably linked to mindset. Thus, the study investigated the cognitive mindset of gifted students in various grades and genders.

2.3. The Difference of Constructive Thinking by Grade and Gender

The Constructive Thinking Inventory is a special tool that evaluates a wide range of dysfunctional thought patterns and is linked to conduct issues, anxiety, and depression (Ammerman et al. 2001). As people have more time to learn from their experiences and develop more coping skills for stress as they age (Park et al. 1997), age may be connected with constructive thinking. Theoretically, one should anticipate that constructive thinking gets better with age, especially when experience outside of school is correlated with age,

as it is for older students (Epstein and Meier 1989). In addition, when education was partially taken into account, age was significantly positively related to behavioral coping and significantly negatively associated with categorical thinking and naive optimism (Park et al. 1997). Young adults did not perform as well on categorical thinking, personal superstition, emotional coping, or naive optimism as adolescents did (Pihet et al. 2011). Children from all grade levels demonstrated a variety of positive thinking skills. Little is known about the constructive thinking of gifted students.

Girls in fifth and sixth grade received significantly higher overall scores for constructive thinking than boys, whereas boys received significantly higher scores than girls for handling irritation, dichotomous thinking, mistrusting others, and superstitious thinking (Li 2003). Men scored higher on global constructive thinking, emotional coping, and categorical thinking than females while rating worse on esoteric thinking (Pihet et al. 2011). American adolescent girls outperformed their male counterparts, but there was no difference between the sexes in the adult sample or the Swiss adolescent and adult samples (Pihet et al. 2011). Males performed better than women on measures of physical self-concept, automatic thoughts (positive), constructive thinking, cognitive flexibility, overall self-concept, and fortitude, while women performed better on measures of affect expression, somatic symptoms, and religious well-being (Roothman et al. 2003). In a general-ability sample, males outperformed females on the physical-recreation subscale, while females outperformed males on the seek-social-support, wishful-thinking, and tension-reduction subscales (Frydenberg and Lewis 1993). These coping-strategy differences, among gifted adolescents, were minor (Frydenberg and Lewis 1993). Young gifted women worked hard in school and displayed signs of perfectionism on occasion, whereas gifted males relied on belonging and self-blame. Men and women have different constructive-thinking styles (Plucker 1998). Furthermore, there was little evidence that gifted adolescents' coping strategies differed by gender or grade (Frydenberg and Lewis 1993). The study examined how constructive thinking differed according to grade and gender.

2.4. The Difference of Emotional Intelligence (EI) by Grade and Gender

Emotional intelligence has become an extensively explored topic of psychological studies in recent years, particularly in terms of how it affects the academic achievement of gifted students (Faisal 2016). The increase in cognitive abilities with an increase in age brings about more social and emotional intelligence (Bar-On 2006); however, the research in this area shows little difference in emotional intelligence according to age (Nasir and Masrur 2010). For example, no significant difference was found between the EI score and age, place of residence, or household income (Faisal 2016). Çelik and Deniz (2008) found no gender difference in emotional intelligence, nor was there any difference in emotional intelligence regarding age in the EI levels of Turkish scouts and scouts from other countries (Nasir and Masrur 2010). Birks et al. (2009) also did not find any significant correlation between age and emotional intelligence in healthcare students (Nasir and Masrur 2010). Fariselli et al. (2006) found a slight but significant positive correlation between emotional intelligence and age and concluded that there are more decisive factors that account for variations in emotional intelligence (Nasir and Masrur 2010). Apparently, EI is not really enhanced through growth and cognitive development.

There is a significant difference in emotional intelligence according to gender. The fifth- and sixth-grade girls obtained significantly higher scores in emotional abilities than boys, especially for perceiving self-emotion, perceiving others' emotions, dealing with self-emotion, and dealing with others' emotions (Li 2003). Katyal and Awasthi (2005) found female adolescents had higher EI scores without reaching significance, which is only suggestive of a trend (Nasir and Masrur 2010). Harrod and Scheer (2005) revealed a significant difference in the scores of males and females aged 16–19 on the emotional-intelligence scale, with females reporting higher EI levels (Nasir and Masrur 2010). Most studies showed that females had higher EI than males, especially in emotional abilities such as perceiving their own and others' emotions.

On emotional intelligence, gifted high-school males were comparable to students in the age-normative sample, while gifted females lagged behind the norm group (Lee and Olszewski-Kubilius 2006). Regardless of gender, gifted students had higher scores on adaptability in emotional intelligence but lower scores on stress management and impulse-control ability compared to the normative sample (Lee and Olszewski-Kubilius 2006). Females in grades 4–8 scored significantly higher than males on all three of the intrapersonal, interpersonal, and total scores in emotional intelligence (Matthews et al. 2018). The intrapersonal scale and total EI scale of non-gifted males scored significantly lower than gifted males, gifted females, and non-gifted females (Matthews et al. 2018). The adaptability of gifted males scored significantly higher than the non-gifted males but not higher than the gifted and non-gifted females (Matthews et al. 2018). There were differences between the gifted and talented students in Grades 9 through 12 in the intrapersonal, adaptability, general-mood subtests, and total emotional-intelligence scores (Al-Hamdan et al. 2017). In addition, gifted males in grades 9 through 12 had higher total emotional-intelligence scores than gifted females, and talented females had higher interpersonal scores than talented males (Al-Hamdan et al. 2017).

According to the related literature, there were different results when comparing the EI of gifted and general students. Gifted males obtained higher EI values than general students; however, gifted females might obtain higher or lower scores than general students in different subscales of EI. In addition, gifted males might have a higher or lower EI than gifted girls in different subscales. Abdulla Abdulla Alabbasi et al. (2021) found gifted students outperformed non-gifted students on EI— $g = 0.226$, $SE = 0.036$, 95% CI [0.155, 0.297], $p < 0.001$ —and the emotional intelligence of gifted females significantly surpassed that of gifted males— $g = 0.164$, $SE = 0.046$, 95% CI [0.074, 0.255], $p < 0.001$ —in a meta-analysis (Abdulla Alabbasi et al. 2021). However, no significant gender differences were found in terms of coherence, satisfaction with life, affect balance, emotional intelligence, self-efficacy, and the social components of self-concept and fortitude (Roothman et al. 2003). Therefore, the study explored the difference in EI of gifted students according to grade and gender.

3. Materials and Methods

The study adopted survey research and random sampling to investigate third- to sixth-grade gifted students in primary school to understand differences in perfectionism, cognitive mindset, constructive thinking, and emotional intelligence by grade and gender.

3.1. Participants

In Taiwan, gifted education services are reinstituted in the third grade after students are first identified as talented in the second grade. A total of 908 gifted pupils in the third through sixth grades participated in the study since the sampling included gifted primary students (549 boys and 359 girls). Children were recruited from twenty-five public elementary schools located in thirteen cities in Taiwan. The school administrator and teachers agreed to take part in the study. Gifted students and their parents also agreed to join the study. A total of 183 (20.2%) participants from the third grade, 182 (20%) participants from the fourth grade, 260 (28.6%) participants from the fifth grade, and 283 (31.2%) participants from the sixth grade were recruited for the study; details are in Table 1.

Table 1. The cross table of gender and grade.

Gender/Grade	Third Grade	Fourth Grade	Fifth Grade	Sixth Grade	Total
Boy	114	108	154	170	546
Girl	69	74	106	113	362
Total	183	182	260	283	908

3.2. Instruments

3.2.1. Multidimensional Perfectionism Scale (MPS)

The MPS is a 57-item self-reported questionnaire that measures four types of perfectionism in 18 dimensions (Tsai 2022). Rigid perfectionism contains three dimensions, including self-oriented perfectionism (SOP, 3 items), contingent self-worth (CSW, 3 items), and black-and-white thinking (BWT, 3 items). Self-criticism perfectionism contains six dimensions, including concern over mistakes (CoM, 3 items), doubts about actions (DA, 3 items), self-criticism (SC, 3 items), dissatisfaction (DSA, 3 items), socially prescribed perfectionism (SPP, 3 items), and perceived parental pressure (PPP, 3 items). Narcissistic perfectionism contains four dimensions, including other-oriented perfectionism (OOP, 3 items), hypercriticism (HC, 3 items), entitlement (E, 3 items), and grandiosity (G, 3 items). Ego-syntonic perfectionism contains three dimensions, including order (O, 4 items), high standard (HS, 4 items), details and checking (D&C, 4 items), planfulness (P, 3 items), as well as satisfaction (SA, 3 items). A six-point Likert scale was used in the study. The coefficient alpha for all the scales was 0.95, and that of each subscale was between 0.68 and 0.91. The composite reliability of each subscale was between 0.74 and 0.91. The average variance extracted was between 0.44 and 0.79. Both reliability and construct validity were demonstrated.

3.2.2. Cognitive Mindset Scale (CMS)

The CMS was revised from the cognitive mindset scale constructed by P'Pool (2012) and consisted of two subscales (Tsai 2022). The fixed mindset (FM) includes six items, and the growth mindset (GM) includes eight items. A six-point Likert scale was used in the study. The coefficient alpha for all the scales was 0.91, and that of each subscale was 0.91 and 0.93. The composite reliability of each subscale was 0.91 and 0.94. The average variance extracted was 0.64 and 0.65. Both reliability and construct validity were demonstrated.

3.2.3. Constructive Thinking Scale (CTS)

The CTS was revised from the constructive-thinking scale developed by Li and Ye (2003, October) and included coping with frustration (CF, 6 items), dealing with negative emotions (DNE, 4 items), optimistic action (OA, 4 items), dichotomous thinking (DT, 3 items), mistrusting others (MtO, 4 items), superstitious thinking (ST, 3 items), naive optimism (NO, 3 items), and mysterious thinking (MT, 4 items). These eight subscales contained a total of 31 items. A six-point Likert scale was used in the study. The coefficient alpha for all the scales was 0.85, and that of each subscale was between 0.70 and 0.88. The composite reliability of each subscale was between 0.64 and 0.85. The average variance extracted was between 0.43 and 0.65. Both reliability and construct validity were demonstrated.

3.2.4. Chinese Quotient Inventory: Youth Version (EQ-I: YV)

The EQ-I: YV was used from Zheng and Wang's (2009) emotional-quotient inventory, which included introspection (6 items), interpersonal relationships (IR, 12 items), stress management (SM, 12 items), adaptation (Ad, 10 items), general mood (GM, 14 items), and a positive impression (PI, 6 items). A four-point Likert scale was used in the study. Each subscale's internal-consistency coefficient value ranged from 0.75 to 0.89; the entire scale was 0.89; each subscale's retest reliability ranged from 0.64 to 0.78; and the total scale was 0.84. The scale is remarkably consistent and stable.

3.3. Data Analysis

T-test analysis and ANOVA were adopted to explore the differences in perfectionism, cognitive mindset, constructed thinking, and emotional intelligence by grade and gender using SPSS 20 version software.

4. Results

The study presented the different levels of perfectionism, cognitive mindset, constructive thinking, and emotional intelligence by grade and gender, as described below.

4.1. The Difference in Perfectionism by Grade and Gender

4.1.1. The Difference in Perfectionism by Grade

In Table 2, third graders outperformed sixth graders in contingent self-worth, order, and satisfaction. They also outperformed fifth graders in socially prescribed perfectionism and other-oriented perfectionism. Fourth graders outperformed sixth graders in contingent self-worth and satisfaction, outperformed third graders in hypercriticism, and outperformed fifth graders in other-oriented perfectionism. Only in hypercriticism did pupils in the sixth grade score higher than third and fifth graders. In terms of ego-syntonic perfectionism, third graders did better than sixth graders. The eleven perfectionism dimensions and the other categories did not significantly differ from one another. Gifted children in grades three through six agreed on self-oriented perfectionism and satisfaction based on the mean of each item, which is above 4. Third graders also approved of socially prescribed perfectionism and planfulness. Organization and hypercriticism were favored by students in the third through fifth grades. Students in the third and fourth grades agreed that ego-synthetic perfectionism exists.

Table 2. The difference in perfectionism by grade.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		F(p)	Sheffe
					Lower	Upper		
SOP	3	12.34	4.11	4.11	11.82	12.86	0.442 (0.723)	
	4	12.49	4.16	4.16	11.91	13.07		
	5	12.33	4.11	4.11	11.91	12.75		
	6	12.12	4.04	4.04	11.73	12.51		
CSW	3	10.80	3.60	3.60	10.17	11.43	3.875 ** (0.009)	3 > 6 4 > 6
	4	10.78	3.59	3.59	10.14	11.43		
	5	10.30	3.43	3.43	9.83	10.78		
	6	9.70	3.23	3.23	9.26	10.14		
BWT	3	7.72	2.57	2.57	7.06	8.38	0.928 (0.427)	
	4	8.25	2.75	2.75	7.57	8.93		
	5	7.62	2.54	2.54	7.18	8.05		
	6	7.77	2.59	2.59	7.32	8.21		
CoM	3	10.08	3.36	3.36	9.52	10.63	1.378 (0.248)	
	4	10.58	3.53	3.53	10.01	11.15		
	5	9.91	3.30	3.30	9.48	10.34		
	6	9.98	3.33	3.33	9.57	10.39		
DA	3	11.04	3.68	3.68	10.40	11.67	2.164 (0.091)	
	4	11.01	3.67	3.67	10.32	11.69		
	5	10.17	3.39	3.39	9.69	10.65		
	6	10.79	3.60	3.59	10.32	11.25		
SC	3	8.48	2.83	2.83	7.86	9.10	2.062 (0.104)	
	4	9.16	3.05	3.05	8.47	9.85		
	5	8.18	2.73	2.73	7.71	8.64		
	6	8.68	2.89	2.89	8.20	9.16		
DSA	3	10.39	3.46	3.46	9.81	10.97	1.462 (0.223)	
	4	10.39	3.46	3.46	9.73	11.05		
	5	9.72	3.24	3.24	9.27	10.17		
	6	10.13	3.38	3.37	9.69	10.58		
SPP	3	12.44	4.15	4.15	11.84	13.04	3.166 * (0.024)	3 > 5
	4	11.73	3.91	3.91	11.04	12.42		
	5	11.16	3.72	3.72	10.64	11.69		
	6	11.65	3.88	3.88	11.16	12.14		
PPP	3	10.33	3.44	3.44	9.71	10.95	2.523	

Table 2. Cont.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		F(p)	Scheffe
					Lower	Upper		
OOP	4	11.02	3.67	3.67	10.35	11.69	(0.057)	3 > 5 4 > 5
	5	10.58	3.53	3.53	10.04	11.11		
	6	11.34	3.78	3.78	10.85	11.84		
	3	11.02	3.67	3.67	10.36	11.69	4.188 **	
	4	11.02	3.67	3.67	10.31	11.72	(0.006)	
	5	9.87	3.29	3.29	9.35	10.38		
HC	6	10.11	3.37	3.37	9.64	10.59		4 > 3 6 > 3 6 > 5
	3	6.31	2.10	2.10	5.84	6.79	6.190 ***	
	4	7.41	2.47	2.47	6.83	7.99	(0.000)	
	5	6.73	2.24	2.24	6.35	7.11		
E	6	7.57	2.52	2.52	7.15	7.99		0.870 (0.456)
	3	7.87	2.62	2.62	7.33	8.41		
	4	7.70	2.57	2.57	7.12	8.28		
G	5	7.36	2.45	2.45	6.95	7.76		0.564 (0.639)
	6	7.47	2.49	2.49	7.06	7.89		
	3	7.16	2.39	2.72	6.65	7.67		
	4	7.08	2.36	2.33	6.56	7.60		
	5	6.80	2.27	2.27	6.39	7.20		
O	6	6.84	2.28	2.28	6.44	7.25		4.000 ** (0.008)
	3	16.71	4.18	4.15	15.96	17.45		
	4	16.15	4.04	4.03	15.34	16.96		
	5	15.98	4.00	4.00	15.38	16.58		
HS	6	15.10	3.78	3.78	14.53	15.68		2.360 (0.070)
	3	16.64	4.16	5.55	15.83	17.46		
	4	17.08	4.27	5.69	16.25	17.90		
D&C	5	16.05	4.01	5.35	15.39	16.71		3.044 * (0.028)
	6	15.84	3.96	5.28	15.24	16.45		
	3	12.73	3.18	3.18	11.91	13.55		
	4	12.61	3.15	3.15	11.73	13.48		
	5	11.46	2.87	2.87	10.82	12.10		
P	6	11.67	2.92	2.92	11.06	12.27		1.924 (0.124)
	3	12.63	4.21	4.21	12.08	13.18		
	4	11.87	3.96	3.96	11.27	12.48		
SA	5	11.83	3.94	3.94	11.34	12.32		4.360 ** (0.005)
	6	11.87	3.96	3.96	11.45	12.30		
	3	14.71	4.90	4.90	14.20	15.21		
	4	14.77	4.92	4.92	14.28	15.26		
	5	14.23	4.74	4.78	13.81	14.64		
Rigid 9	6	13.77	4.59	4.59	13.37	14.17		1.633 (0.180)
	3	30.86	3.43	3.43	29.39	32.33		
	4	31.52	3.50	3.50	29.91	33.12		
Self- criticism 18	5	30.25	3.36	3.36	29.17	31.34		2.357 (0.070)
	6	29.58	3.29	3.29	28.49	30.67		
	3	62.75	3.49	3.49	60.29	65.21		
	4	63.88	3.55	3.55	60.92	66.84		
Narcissistic 12	5	59.71	3.32	3.32	57.70	61.72		1.735 (0.158)
	6	62.57	3.48	3.48	60.54	64.61		
	3	32.37	2.70	2.70	30.73	34.00		
	4	33.20	2.77	2.77	31.40	35.01		
	5	30.75	2.56	2.56	29.44	32.06		
Ego- syntonic 18	6	32.00	2.67	2.67	30.61	33.40		4.118 ** (0.006)
	3	73.41	4.08	4.08	70.76	76.07		
	4	72.48	4.03	4.03	69.69	75.26		
	5	69.54	3.86	3.86	67.40	71.68		
Total Score 57	6	68.25	3.79	3.79	66.25	70.25		2.987 * (0.030)
	3	199.39	3.50	3.50	192.83	205.95		
	4	201.08	3.53	3.53	193.82	208.34		

Table 2. Cont.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		F(p)	Scheffe
					Lower	Upper		
	5	190.26	3.34	3.34	185.15	195.36		
	6	192.41	3.38	3.38	187.24	197.58		

* $p < 0.05$, ** $p < 0.001$, *** $p < 0.001$.

4.1.2. The Difference in Perfectionism by Gender

Girls scored much higher than boys for self-oriented perfectionism, contingent self-worth, concern over mistakes, self-criticism, high standards, and rigid and self-critical perfectionism, as in Table 3. Boys exhibited higher levels of entitlement, other-oriented narcissistic perfectionism, and other-oriented perfectionism than girls. Gifted boys and girls agreed on self-oriented perfectionism and satisfaction when the mean of each item is over 4. Girls endorsed planning, high standards, and being organized.

Table 3. The difference in perfectionism by gender.

Dimension	Gender	M	SD	M of Each Item	t(p)	Compare
SOP	Boy	12.07	3.48	4.02	−2.274 *	girl > boy
	Girl	12.62	3.62	4.21	(0.023)	
CSW	Boy	10.04	4.09	3.35	−2.429 *	girl > boy
	Girl	10.71	4.00	3.57	(0.015)	
BWT	Boy	7.71	4.23	2.57	−0.828	
	Girl	7.94	3.82	2.65	(0.408)	
CoM	Boy	9.75	3.70	3.25	−3.548 ***	girl > boy
	Girl	10.62	3.54	3.54	(0.000)	
DA	Boy	10.68	4.20	3.56	−0.185	
	Girl	10.74	4.18	3.58	(0.853)	
SC	Boy	8.20	4.08	2.73	−3.411 **	girl > boy
	Girl	9.17	4.27	3.06	(0.001)	
DSA	Boy	9.94	4.02	3.31	−1.577	
	Girl	10.36	3.83	3.45	(0.115)	
SPP	Boy	11.51	4.32	3.84	−1.423	
	Girl	11.93	4.31	3.98	(0.155)	
PPP	Boy	10.84	4.31	3.61	−0.021	
	Girl	10.84	4.42	3.61	(0.983)	
OOP	Boy	10.65	4.41	3.55	2.139 *	boy > girl
	Girl	10.02	4.30	3.34	(0.033)	
HC	Boy	7.21	3.69	2.40	1.822	
	Girl	6.77	3.21	2.26	(0.069)	
E	Boy	7.80	3.67	2.60	2.621 **	boy > girl
	Girl	7.17	3.46	2.39	(0.009)	
G	Boy	7.10	3.55	2.37	1.820	
	Girl	6.68	3.26	2.23	(0.069)	
O	Boy	15.68	5.09	3.92	−1.485	
	Girl	16.20	5.16	4.05	(0.138)	
HS	Boy	15.96	5.54	3.99	−2.381 *	girl > boy
	Girl	16.83	5.21	4.21	(0.018)	
D&C	Boy	11.87	5.59	2.97	−0.877	
	Girl	12.19	5.33	3.05	(0.381)	
P	Boy	11.83	3.90	3.94	−1.645	
	Girl	12.27	3.86	4.09	(−100)	
SA	Boy	14.24	3.51	4.75	−0.517	
	Girl	14.36	3.30	4.79	(0.605)	
Rigid	Boy	29.82	9.79	3.31	−2.207 *	girl > boy
	Girl	31.27	9.55	3.47	(0.028)	
Self-criticism	Boy	60.92	17.54	3.38	−2.278 *	girl > boy

Table 3. Cont.

Dimension	Gender	M	SD	M of Each Item	<i>t</i> (<i>p</i>)	Compare
Narcissistic	Girl	63.66	17.76	3.54	(0.023)	boy > girl
	Boy	32.76	11.99	2.73	2.711 **	
Ego—syntonic	Girl	30.64	10.65	2.55	(0.007)	
	Boy	69.58	18.02	3.87	−1.861	
Total Score	Girl	71.84	17.74	3.99	(0.063)	
	Boy	193.08	45.42	3.39	−1.429	
	Girl	197.41	43.96	3.46	(0.153)	

Boy = 546, girl = 359, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

4.2. The Difference in Cognitive Mindset by Grade and Gender

4.2.1. The Difference in Cognitive Mindset by Grade

The cognitive mindset of gifted students by grade were not different, as seen in Table 4. In a fixed mindset, pupils in the third grade received the highest grades, followed, in order, by those in the fourth, sixth, and fifth grades. Students in the fourth grade showed greater growth-mindset averages than kids with fixed mindsets. Students in the fourth grade received the greatest scores in terms of growth mindset, followed, in order, by children in the third, sixth, and fifth grades. Students in the fourth grade received the greatest scores in terms of the total scores for cognitive mindset, followed, in order, by children in the sixth, fifth, and third grades. Gifted students in the third to sixth grades all disagreed on the fixed mindset and growth mindset, as the mean of each item was above 4. However, for the mean with decimal-point rounding, third to sixth graders may tend to have a growth mindset.

Table 4. The difference in cognitive mindset by grade.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		<i>F</i> (<i>p</i>)
					Lower	Upper	
Fixed mindset	3	18.27	8.28	3.05	17.06	19.47	1.594 (0.189)
	4	17.51	7.80	2.92	16.37	18.65	
	5	16.72	6.96	2.79	15.87	17.57	
	6	17.28	6.99	2.88	16.46	18.10	
Growth mindset	3	30.25	10.17	3.78	28.77	31.74	0.798 (0.495)
	4	31.26	9.95	3.91	29.80	32.71	
	5	29.90	8.90	3.74	28.82	30.99	
	6	30.18	9.04	3.77	29.12	31.24	
Total score	3	52.29	16.14	3.74	49.94	54.64	1.369 (0.251)
	4	54.75	14.51	3.91	52.63	56.87	
	5	54.00	13.99	3.86	52.29	55.71	
	6	54.66	13.78	3.90	53.05	56.27	

4.2.2. The Difference in Cognitive Mindset by Gender

There were no gender differences in cognitive mindset, as in Table 5. In both fixed and growth mindsets, girls slightly outperformed boys. Boys exhibited a slightly greater cognitive mindset than girls, according to the total results. Boys and girls did not agree on fixed mindset and growth mindset in terms of the mean of each item being above 4.

4.3. The Difference in Constructive Thinking by Grade and Gender

4.3.1. The Difference in Constructive Thinking by Grade

Only in mistrust of others did third- and fifth-grade pupils do significantly better than fourth-grade students, as in Table 6. The other sub-scales did not differ by grade. Students in the third grade performed best in terms of coping with frustration, mistrusting others, dichotomous thinking, and optimistic action. Students in the fifth grade performed the best overall and in dealing with negative emotions. Students in the sixth grade scored

the highest on naive optimism. As the means of each item was above four, third through sixth graders concurred on coping with frustration, mistrusting others, and dichotomous thinking. Students in the third through fifth grades agreed on optimistic action. In addition, there was agreement on superstitious thinking between third and fifth graders.

Table 5. The difference of cognitive mindset by gender.

Dimension	Gender	M	SD	M of Each Item	<i>t</i> (<i>p</i>)
Fixed mindset	Boy	17.19	7.41	2.87	−0.969
	Girl	17.68	7.47	2.95	(0.333)
Growth mindset	Boy	30.24	9.55	3.78	−0.293
	Girl	30.43	9.24	3.80	(0.770)
Total Score	Boy	54.04	14.65	3.86	0.094
	Girl	53.95	14.20	3.85	(0.925)

Table 6. The difference in constructive thinking by grade.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		<i>F</i> (<i>p</i>)	Scheffe
					Lower	Upper		
CF	3	27.72	6.99	4.62	26.66	28.77	1.220 (0.301)	-
	4	26.90	6.41	4.48	25.94	27.85		
	5	27.35	6.04	4.56	26.59	28.10		
	6	26.62	6.48	4.44	25.86	27.38		
ST	3	12.22	4.50	4.07	11.54	12.90	1.090 (0.353)	-
	4	11.75	4.32	3.92	11.11	12.39		
	5	12.31	3.86	4.10	11.83	12.79		
	6	11.78	4.03	3.93	11.31	12.26		
MtO	3	18.86	5.05	4.72	18.10	19.62	6.601 *** (0.000)	3 > 4 5 > 4
	4	17.05	5.27	4.26	16.27	17.83		
	5	18.81	4.62	4.70	18.23	19.38		
	6	17.62	4.97	4.41	17.03	18.20		
DNE	3	13.39	5.11	3.35	12.62	14.16	0.480 (0.697)	-
	4	13.13	5.27	3.28	12.34	13.91		
	5	13.66	4.86	3.42	13.06	14.27		
	6	13.25	4.85	3.31	12.68	13.82		
DT	3	14.06	4.04	4.69	13.45	14.68	0.819 (0.483)	-
	4	13.37	4.29	4.46	12.73	14.01		
	5	13.74	4.11	4.58	13.23	14.26		
	6	13.74	4.06	4.58	13.26	14.22		
OA	3	16.81	4.65	4.20	16.13	17.49	1.498 (0.214)	-
	4	16.53	4.61	4.13	15.86	17.21		
	5	16.51	4.76	4.13	15.93	17.09		
	6	15.96	4.21	3.99	15.47	16.45		
NO	3	8.72	3.83	2.91	8.14	9.31	2.539 (0.055)	-
	4	8.89	3.65	2.96	8.35	9.44		
	5	9.38	3.78	3.13	8.91	9.86		
	6	9.65	3.34	3.22	9.25	10.04		
MT	3	13.80	4.85	3.45	13.09	14.51	1.316 (0.268)	-
	4	13.20	5.09	3.30	12.45	13.94		
	5	14.04	5.24	3.51	13.40	14.68		
	6	13.39	4.90	3.35	12.82	13.96		
Total Score	3	119.24	33.13	3.85	114.41	124.07	0.800 (0.494)	-
	4	117.93	26.95	3.80	113.99	121.87		
	5	121.63	29.67	3.92	118.01	125.25		
	6	121.12	22.83	3.91	118.45	123.79		

*** $p < 0.001$.

4.3.2. The Difference in Constructive Thinking by Gender

There were no gender differences in any of the subscales of constructive thinking, as shown in Table 7. Girls outperformed boys somewhat in terms of coping with frustrations, superstition, mistrust of others, dichotomous thinking, optimistic action, and overall scores. Males performed slightly better than girls when it came to dealing with negative emotions, native optimism, and mysterious thinking. Boys and girls all agreed on coping with frustration, mistrusting others, dichotomous thinking, and optimistic action. In addition, girls also concurred on superstitious thinking.

Table 7. The difference in constructive thinking by gender.

Dimension	Gender	M	SD	M of Each Item	<i>t</i> (<i>p</i>)
CF	Boy	26.92	6.80	4.49	−1.014
	Girl	27.36	5.89	4.56	(0.311)
ST	Boy	11.92	4.21	3.97	−0.684
	Girl	12.12	4.03	4.04	(0.494)
MtO	Boy	18.06	5.07	4.52	−0.211
	Girl	18.14	4.87	4.54	(0.833)
DNE	Boy	13.64	4.84	3.41	1.943
	Girl	12.97	5.17	3.24	(0.052)
DT	Boy	13.73	4.27	4.58	−0.072
	Girl	13.75	3.88	4.58	(0.943)
OA	Boy	16.38	4.64	4.10	−0.145
	Girl	16.42	4.40	4.11	(0.884)
NO	Boy	9.30	3.75	3.10	−0.145
	Girl	9.15	3.48	3.05	(0.884)
MT	Boy	13.72	5.03	3.43	0.728
	Girl	13.47	5.04	3.37	(0.903)
Total Score	Boy	120.24	28.77	3.88	−0.391
	Girl	120.48	26.25	3.89	(0.696)

4.4. The Difference in Emotional Intelligence by Grade and Gender

4.4.1. The Difference in Emotional Intelligence by Grade

There were no variations in any of the emotional-intelligence subscales by grade, as shown in Table 8. Fourth- through sixth-grade pupils typically scored between 50% and 60% above the grade norm. Introspection, stress management, general mood, and total score were marginally higher among fifth graders than among fourth and sixth graders. The adaptation and positive impression scores of fourth-grade students were somewhat higher than those of fifth and sixth graders. In terms of interpersonal relationships, sixth-grade students performed somewhat better than fourth and fifth graders. Fourth graders to sixth graders all agreed on interpersonal relationships based on the mean of each item being over 4.

Table 8. The difference in emotional intelligence by grade.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		<i>F</i> (<i>p</i>)	Scheffe
					Lower	Upper		
Int	4	15.70	4.52	2.62	68	15.04	16.36	0.708
	5	15.95	4.63	2.66	68	15.38	16.51	(0.493)
	6	15.48	4.43	2.58	55	14.96	16.00	
IR	4	36.87	6.79	3.07	51	35.87	37.86	0.022
	5	36.93	6.01	3.08	51	36.20	37.67	(0.978)
	6	36.99	5.55	3.08	51	36.34	37.64	
SM	4	30.38	7.25	2.53	57	29.32	31.44	0.993
	5	31.26	6.43	2.61	64	30.48	32.05	(0.371)
	6	30.92	6.01	2.58	64	30.22	31.63	

Table 8. Cont.

Dimension	Grade	M	SD	M of Each Item	95% Confidence Interval		F(p)	Scheffe
					Lower	Upper		
Ad	4	29.46	6.14	2.95	60	28.56	30.36	0.437
	5	29.05	5.89	2.91	60	28.33	29.76	(0.646)
	6	28.96	5.56	2.90	52	28.31	29.61	
GM	4	41.81	8.31	2.99	56	40.60	43.03	0.330
	5	41.90	7.76	2.99	56	40.95	42.85	(0.719)
	6	41.40	7.09	2.96	51	40.57	42.23	
PM	4	15.19	3.60	2.53	52	14.66	15.71	1.588
	5	14.89	3.16	2.48	52	14.51	15.28	(0.205)
	6	14.63	3.19	2.44	52	14.26	15.00	
Total Score	4	55.83	9.29	1.40	61	54.47	57.19	0.279
	5	56.23	8.91	1.41	61	55.14	57.31	(0.757)
	6	55.68	8.13	1.39	61	54.73	56.63	

4.4.2. The Difference in Emotional Intelligence by Gender

Introspection, interpersonal relationships, and general mood varied by gender, as seen in Table 9. In contrast to girls, boys scored significantly better on introspection and general mood, while girls scored higher on interpersonal relationships. Other elements were not gender-differentiated. Boys and girls all agreed on interpersonal relationships, as the mean of each item is above 4.

Table 9. The difference in emotional intelligence by gender.

Dimension	Gender	M	SD	M of Each Item	PR	t(p)	Compare
Int	Boy	16.02	4.45	2.67	57	2.276 *	boy > girl
	Girl	15.25	4.57	2.54	40	(0.023)	
IR	Boy	36.44	6.15	3.04	16	−2.659 **	girl > boy
	Girl	37.65	5.81	3.14	10	(0.008)	
SM	Boy	30.84	6.78	2.57	56	−0.452	-
	Girl	31.06	6.05	2.59	59	(0.652)	
Ad	Boy	29.30	6.05	2.93	60	1.014	-
	Girl	28.85	5.49	2.89	52	(0.311)	
Total Score	Boy	56.03	9.09	1.40	41	0.426	-
	Girl	55.76	8.11	1.39	32	(0.670)	
GM	Boy	42.29	7.72	3.02	57	2.613 **	boy > girl
	Girl	40.78	7.46	2.91	46	(0.009)	
PI	boy	14.97	3.43	2.50	44	1.107	-
	Girl	14.69	3.09	2.45	37	(0.269)	

* $p < 0.05$, ** $p < 0.01$.

5. Discussion

The dimensions of perfectionism varied significantly by grade. Students in the third grade tended to value ego-syntonic perfections such as order, satisfaction, and contingent self-worth more. Students in the fourth grade exhibit hypercriticism and other-oriented perfectionism as well as satisfaction and contingent self-worth. Gifted children in the sixth grade had more critical qualities than students in earlier grades. It was shown that the perfectionist features of students could alter as they become older, and educators should be cautious about this issue. The outcome was consistent with those of [Chen \(1996\)](#), [Uz Baş \(2011\)](#), and [DeKryger \(2005\)](#). Children's perfectionist tendencies appeared to be more noticeable and advantageous when they were in the third or fourth grade. They tended to become more critical as they grew older. The majority of gifted students had a tendency for self-oriented perfectionism, organization, and hypercriticism, which was the cause of this. They may put a lot of pressure on themselves to perform well because of demands from

their parents, professors, or classmates, while also making requests of others to maintain their good work.

The dimensions of perfectionism varied significantly according to gender. The findings were consistent with [Uz Bağ's \(2011\)](#) study, which found that girls were more sensitive to errors than boys. It seems that girls are more prone to judge themselves depending on their performance; thus, they will hold themselves to high standards and worry about making mistakes. Boys often had an entitlement attitude and exhibited narcissism. The perception that men predominate in Eastern society may also have an impact on this phenomenon. For the majority of the subscales, there were no significant differences according to gender; this finding was, likewise, similar to those of [Siegle and Schuler \(2000\)](#), [Chen \(1996\)](#), as well as [Rice et al. \(2004\)](#). Furthermore, gifted boys and girls shared the same ideals of self-centered perfection and satisfaction. Girls endorsed organization, setting high goals, and planning as well. The cause for this was that gifted perfectionists in elementary school receive high grades for their academic work, which encourages them to pursue perfectionism and feel content with their results.

The mindset did not vary by grade. Gifted students in third through sixth grades all slightly disagreed with a fixed mindset and a growth mindset. However, it appears that third graders tend to believe that intelligence and talent are fixed, whereas fourth graders believe that these traits are malleable. While the findings of [Dweck \(2006, 2007\)](#) and [Schroder et al. \(2017\)](#) were not replicated here, fixed-mindset messages predominated among students in the achievement range, while older children tended to support the growth mindset more ([Boaler 2013](#)). There were no differences in cognitive mindset between the genders. These results were different from those of [Dweck \(2006, 2007\)](#) and [Boaler \(2013\)](#), but similar to those of [Macnamara and Rupani \(2017\)](#). The cause for this is that gifted students in elementary school have not yet cultivated a fixed mindset or growth mindset. Educators could be concerned with their affective development, to develop a growth mindset.

According to the reverse counting of mistrust of others, third- and fifth-grade students clearly have a higher tendency to trust individuals than fourth-grade students. There were no obvious differences in the level of constructive thinking by grade, with the exception of mistrust of others. This conclusion did not corroborate the study of [Park et al. \(1997\)](#) nor [Epstein and Meier's \(1989\)](#) assumption that older students' constructive-thinking skills were superior to those of younger students. There were no apparent differences in constructive thinking between genders. The findings of [Li \(2003\)](#), [Pihet et al. \(2011\)](#), and [Roothman et al. \(2003\)](#) could not be compared to those of the study. Third through sixth graders shared a common understanding of dealing with frustration, mistrusting others, and dichotomous thinking, despite the fact that levels of mistrust differed dramatically by grade. Third through fifth graders agreed on optimistic action. Between third and fifth graders, there was agreement on superstitious thinking as well. It appears that the majority of gifted students have developed the coping skills of frustration and proactive action. In addition, educators must be aware of the detrimental effects that distrusting others, thinking in dichotomies, and superstitious thinking have on gifted students.

There were no variations in any of the emotional-intelligence subscales by grade. The outcome was consistent with those of [Çelik and Deniz \(2008\)](#), [Birks et al. \(2009\)](#), [Faisal and Ghani \(2015\)](#), and [Nasir and Masrur \(2010\)](#), but it did not correspond to the hypothesis of [Bar-On \(2006\)](#). The emotional intelligence of gifted children is medium and, moving forward, it will be essential to enhance these emotional-intelligence knowledge and skills. There was a significant difference in the dimensions of emotional intelligence by gender. Boys keep themselves in a pleasant mood and have nice introspection. Girls are also quite good at interacting with others. The findings of [Li \(2003\)](#), [Katyal and Awasthi \(2005\)](#), and [Harrod and Scheer \(2005\)](#) results, that grade-school girls scored much higher on emotional capacities than boys ([Nasir and Masrur 2010](#)), did not align with this study's findings. This was in contrast to the research of [Roothman et al. \(2003\)](#), which found no appreciable gender differences in emotional intelligence. In addition, boys and girls all agreed on

interpersonal relationships. It may be too much pressure for apparently brilliant girls to maintain a positive attitude because they place so much emphasis on the performance of interpersonal interactions, self-oriented perfectionism, and high standards. Boys also favored self-oriented perfection and satisfaction so they could be happy and reflect.

6. Conclusions

The study found that younger pupils exhibited more pleasant perfectionist characteristics such as contingent self-worth, order, and satisfaction. Students in sixth grade outperformed third and fifth graders only in hypercriticism. When kids were in the third or fourth grade, their perfectionist tendencies seemed to be more apparent and positive. As they grew older, they tended to become more critical. Girls also tended to judge themselves more harshly and worry about making mistakes because they were more likely to evaluate themselves based on their performance. Boys frequently exhibited narcissistic traits and placed expectations on other people. This behavior might also be influenced by the idea that men predominate in Eastern society. Instructors must be aware that gifted students may exhibit perfectionist traits that can vary with age and gender.

According to grade or gender, there were no variations in cognitive mindset. The outcome differed from that of Dweck (2006, 2007), where older children tended to support the growth mindset more, while fixed-mindset messages predominated among students throughout the achievement spectrum (Boaler 2013). According to the study, gifted primary-school pupils did not acquire a fixed or growth attitude. They still have the ability to develop a growth mindset by gaining relevant knowledge. It is crucial for educators to be aware of this and consult with pupils who have fixed mindsets as soon as possible.

Only in mistrust of others did the third- and fifth-grade pupils do considerably better than the fourth-grade students; there were no grade-specific differences in the other subscales. Each subscale of constructive thinking showed no gender differences. Teachers must be concerned about the trust that gifted third and fifth graders feel in them. There were gender differences in introspection, interpersonal interactions, and general mood, but not in any of the emotional-intelligence subscales by grade. Boys are adept at reflecting on themselves and maintaining a positive mood. Girls also have excellent interpersonal relationships. Teachers could observe gifted girls' inner feelings and gifted boys' interpersonal relationships.

There were two limitations to the study. The study only explored the differences in grade and gender levels of perfectionism, mindset, constructive thinking, and emotional intelligence. In addition, the study did not conduct further interviews with gifted pupils to make sure of their inner thinking. There were some discrepancies with previous studies; to further analyze the data in the future, researchers could broaden the research subjects, select alternative variables, or use quantitative research techniques. Educators could gain a better understanding of the affective straits of gifted students as a result of the study and they could be more concerned about these issues in the future.

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