

A Study on the Psychological Well-Being of Gifted High School Students

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ABSTRACT

Gifted individuals are those who demonstrate high-level performance in many aspects [1]. Although this appears to be an advantageous trait for gifted individuals, it can sometimes turn into a disadvantage. The aim of this study is to investigate whether the positive psychology-based psycho-education program developed by the researcher has an effect on the psychological well-being levels of gifted students. The study group consists of 12 gifted students studying at a high school. The students participated in a psychological well-being training program for 8 weeks, with sessions held once a week for 1 h. For data analysis, the Kruskal-Wallis and Wilcoxon Tests were used. The study concluded that there was a significant difference in the PWB-SF results when comparing the pre-training and post-training outcomes. It was also found that factors such as age, gender, targeted profession and family unity did not affect the PWB-SF and FAS results. Another finding was that the FAS results predicted the PWB-SF results.

Keywords: Giftedness, Psychological well-being, Psycho-education, Adolescents, Family

INTRODUCTION

Gifted individuals can experience internal experiences that differ qualitatively and quantitatively from those of their peers. Some of these experiences, which pose challenges in various phases of their lives, include perfectionism, low self-perception, excessive competitiveness, anxiety, self-criticism, communication difficulties, identity confusion and social isolation. Research indicates that gifted children and adolescents face psychological and emotional problems more frequently compared to their typically developing peers [2-3]. These challenges suggest that the psychological well-being levels of gifted individuals may be lower than those of their peers.

The concept of giftedness

The meaning of the term "giftedness" has undergone significant changes over time. Initially, it referred to exceptionally successful children, but later it evolved to describe the top 2% of children based on specific test results [4]. According to Renzulli's definition, giftedness arises from the interaction of three fundamental traits: "Above-average ability," "creativity" and "motivation" [5]. Roeper, however, expanded the concept to include its emotional dimensions, describing giftedness as a heightened sense of awareness, advanced sensitivity and understanding, combined with the ability to transform mental and emotional experiences into meaningful insights [6].

Gifted adolescents often attract special attention in society due to the innovative ideas and contributions they offer by leveraging their intellectual abilities. However, their ability to effectively utilize

these unique skills depends on whether their traits are adaptive. In this context, it has been observed that non-adaptive perfectionist attitudes, negative self-perception, unhealthy problem-solving skills and ineffective coping strategies with stress can lead to emotional and behavioral issues in gifted adolescents. In other words, for the cognitive skills and intellectual strengths of gifted individuals to positively influence their psychological well-being, their self-perception, perfectionist tendencies, and problem-solving approaches must align with adaptive characteristics. Therefore, understanding and addressing factors that could threaten the emotional development of gifted children and adolescents are essential for enabling them to fully realize their potential [7].

Many studies conducted with gifted individuals focus on the concept of self or self-esteem. Self-perception refers to how individuals view and evaluate themselves, encompassing complex emotions and thoughts. Roedell suggests that developmental inconsistencies and deficiencies can lead gifted individuals to perceive themselves as inadequate [8]. Their analytical skepticism may sometimes extend to their own self-perceptions. Imbalances in developmental areas and unrealistic expectations can result in low self-esteem, which may become a negative factor in an individual's psychosocial life [9]. Self-esteem is recognized as an indicator of psychological well-being. A meta-analysis by Judge et al., found a strong correlation between self-esteem, overall life satisfaction and psychological well-being [10]. Additionally, numerous studies have reported a significant relationship between self-esteem and social-emotional experiences at school [11]. This highlights the impact of school life on well-being. A positive school climate can

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be considered a prerequisite for happy students and activities aimed at strengthening self-perception can contribute to improving students' psychological well-being.

One of the key concepts essential for psychological well-being is coping with stress. Research shows that gifted students tend to have higher levels of general anxiety and stress. The advanced metacognitive dimension observed in gifted individuals may enhance their tendency to explore alternatives and engage in active coping efforts. However, in some cases, their cognitive performance may also increase their inclination toward intuitive interests and choices. Being intuitive in social relationships and forming judgments based on this intuition can negatively affect the cognitive evaluation process during coping. Studies on how gifted individuals cope with stress have revealed that coping skills are closely related to social relationships, life satisfaction and psychological well-being. A study by Frydenberg et al., identified a significant negative relationship between "non-creative coping strategies" and psychological well-being [12]. Conversely, the same study found that children who frequently used creative coping strategies demonstrated higher levels of well-being. Similar findings suggest that individuals who effectively utilize coping skills have an advantage in terms of psychological well-being. In a literature review, Garcia emphasized that enhancing adolescents coping skills could help them perceive stressful situations differently and respond positively to such challenges [13]. The study also found that adolescents who employed positive coping strategies, such as efforts to see the good in a difficult situation and seeking social support, were less affected by stress. This evidence suggests that adopting positive coping strategies has a favorable impact on psychological well-being.

Another key concept critical to the psychological well-being of gifted individuals is perfectionism. Perfectionism is a multifaceted and complex construct characterized by setting excessively high standards and experiencing intense anxiety by focusing on mistakes [14]. Gifted individuals often face emotional and social challenges such as perfectionism, feeling alienated by peers, pursuing unattainable goals, perceiving themselves as inadequate in meeting family and societal expectations and experiencing intense pressure to achieve success. These issues can sometimes lead to depression. Furthermore, their heightened sensitivity and emotional vulnerability increase the risk of negatively impacting their psychological well-being [15]. These challenges highlight the importance of addressing perfectionism and related factors to support the psychological health of gifted individuals effectively.

While some studies in the literature suggest that the needs of gifted adolescents largely resemble those of their typically developing peers, it is also emphasized that their cognitive and emotional differences can lead to unique psychological indicators. The cognitive development of gifted adolescents often surpasses their social and emotional development. Additionally, their friendships tend to differ from those of their non-gifted peers, as they prefer to connect with individuals who are closer to their cognitive level. However, their exceptional abilities and achievements can sometimes result in being excluded from peer groups and social environments. These individuals may occasionally face challenges in communication and experience difficulties in adapting to their surroundings [16]. Stuart and Beste highlighted that the sensitivity and emotional responsiveness of gifted individuals might make it difficult for them to establish connections with others, leading to a tendency toward introversion. Another study found that the advanced cognitive abilities of gifted individuals do not entirely shield them from negative psychological states. Their lagging

social development may contribute to anxiety, sadness (depression) and heightened emotional sensitivity [17]. These findings underline the importance of addressing the social-emotional challenges faced by gifted adolescents to support their overall well-being.

Psychological well-being

Throughout history, various perspectives have emerged to understand what it means to be well. Each definition has been shaped by the prevailing knowledge and context of its time. For instance, Erikson's psychosocial development theory describes well-being as achieving developmental tasks in each life stage, while Maslow's theory defines it as self-actualization. Similarly, Rogers conceptualized well-being through his fully functioning model. Each theorist has sought to explain well-being within the framework of their historical and intellectual context [18].

Satisfaction with the past, experiencing flow in the present, joy, pleasures, happiness, optimism about the future, hope, transcendence and faith are constructive cognitions that contribute to well-being. The concept of well-being is generally divided into two main categories: Subjective well-being and psychological well-being.

Subjective well-being emphasizes the frequency of emotions over their intensity. It encompasses an individual's positive and negative evaluations of life events, overall life satisfaction and the fulfilment derived from various life domains. Structurally, subjective well-being can be divided into two dimensions: The affective dimension, which includes positive and negative evaluations and the cognitive dimension, which covers life satisfaction and the fulfilment gained from life domains. Individuals assess their lives both cognitively and emotionally. These evaluations directly influence their overall life satisfaction and happiness.

The psychological well-being approach suggests that every individual possesses inherent potential. It is assumed that when individuals realize this potential, their emotional state improves, leading to greater happiness. Unlike subjective well-being, achieving everything one desires does not necessarily result in happiness within the framework of psychological well-being. This concept is more personal, with a primary focus on self-actualization. Psychological well-being centers on individuals realizing their full potential and achieving self-fulfillment [19].

Well-being is closely tied to maintaining functionality in life events. Individuals with high psychological well-being exhibit positive attitudes toward themselves, form reliable and fulfilling relationships with others, demonstrate independence and resilience, excel in overcoming environmental challenges, have a sense of purpose and goals in life and show a constant desire for personal growth. In essence, psychological well-being is about sustaining human functions and fostering personal development [20].

According to Ryff psychological well-being consists of six dimensions [21]. The first dimension, self-acceptance, refers to an individual's ability to embrace themselves fully, including both strengths and weaknesses and to hold positive feelings about their past [22]. The positive relations dimension highlights the capacity to build strong relationships, characterized by trust, love and empathy. The autonomy dimension reflects the ability to regulate one's behavior independently, free from societal pressure, fear or external beliefs and to demonstrate high functionality. Environmental mastery involves managing and shaping one's environment according to personal needs, as well as maintaining control over daily events and responsibilities. The

purpose in life dimension emphasizes the creation of meaningful goals and a sense of coherence, contributing to a clear life purpose. Finally, personal growth, closely aligned with the concept of self-actualization, refers to an individual's ability to recognize, develop and transform their unique potential by refining their attitudes, emotions and behaviors [23].

There are numerous factors influencing psychological well-being. However, a review of the literature reveals that research specifically examining the factors affecting the psychological well-being of gifted individuals is quite limited. In a study conducted by Tohum to explore how gifted children can be supported in achieving happiness and to investigate their metaphorical perceptions of happiness, it was found that peer relationships and family support significantly impact their happiness levels and subjective well-being. Similarly, a study by Jun et al., concluded that, in addition to cognitive assistance, social and emotional support are also critical [24]. Parental support, in particular, was highlighted as an essential factor for gifted individuals to experience happiness. This emphasizes the importance of holistic support systems for nurturing the psychological well-being of gifted children and adolescents.

Research comparing the psychological well-being of gifted individuals with that of their typically developing peers has yielded varying results. In a study conducted by Hanchon, a positive correlation was identified between the levels of perfectionism and the presence of depression and psychiatric symptoms among gifted middle school students [25]. These findings suggest that the subjective well-being of gifted individuals may be at risk, highlighting the need for closer attention to their emotional and psychological health.

In addition to studies highlighting the challenges faced by gifted individuals, there is also research suggesting that gifted individuals do not differ significantly from their typically developing peers in terms of psychological well-being [26-28]. Moreover, some studies have found that gifted children and adolescents may be emotionally and behaviorally healthier than their peers [29-35].

A study conducted in Iran by Mahdian et al., explored the psychological well-being of gifted individuals through the development of an artistic approach to problem-solving training programs [36]. This program aimed to assess its impact on the social attitudes and mental happiness of gifted adolescents. The experimental group participated in 14 sessions, each lasting 90 min. The findings revealed that the training program positively influenced the social attitudes and mental happiness of the participants. The study concluded that group training programs using an artistic approach to problem-solving could enhance the social attitudes and mental happiness of gifted adolescents.

A comprehensive literature review was conducted on the factors influencing psychological well-being and an eight-session positive psychology-based psycho-education program was developed by the researcher for high school students. The program includes various topics and activities aimed at enhancing self-esteem, emphasizing the importance of goal setting, recognizing character strengths and self-awareness, integrating character strength into life experiences and understanding the concepts of happiness and psychological well-being along with the factors that influence them. Additionally, the program covers the development of coping skills, fostering a positive outlook, and improving communication abilities through informative content and interactive exercises.

This study aims to examine the impact of a psycho-education program,

designed by the researcher, on the psychological well-being levels of gifted high school students. Additionally, the research investigates whether the psychological well-being and family assessment perceptions of gifted high school students differ based on factors such as gender, age, career aspirations and family cohesion.

MATERIALS AND METHODS

This section provides information about the research design, study group, data collection tools, data collection process and data analysis.

Research design

This study, which aims to examine the impact of a positive psychology-based psycho-education program on the psychological well-being levels of gifted high school students, is designed as a "single-group pre-test-post-test quasi-experimental model." The independent variable in the study is the implementation of the positive psychology-based psycho-education program, while the dependent variable is the level of psychological well-being. Additionally, the research explores whether psychological well-being levels and family perceptions differ based on independent variables such as gender, age, career aspirations and family cohesion. It also investigates whether the Family Assessment Scale (FAS) results predict the Psychological Well-Being Scale (PWBS) outcomes.

This study was conducted with a single group of 12 gifted students attending a public high school in Turkiye. The participants were selected after being informed about the psycho-education process and the research details, focusing on identifying gifted and voluntary students. Once the selected students were thoroughly briefed about the process, a pre-test was administered. Following the completion of the 8-week psycho-education program, a post-test was conducted, marking the conclusion of the study.

Study group

The study group consisted of 12 gifted high school students attending a public school who voluntarily agreed to participate in the educational program. The average age of the group was 14.5 years. After obtaining the necessary legal permissions from the institution overseeing the school, consent forms were collected from the participants, and written permission was secured from their families.

Data collection tools

In this study, two scales and two forms were utilized for the purpose of data collection. Family Assessment Scale (FAS). The family assessment scale is a self-report tool designed to evaluate families' perceptions of how effectively they perform various functions. Originally developed in 1983 by Brown University and Butler Hospital in the United States, the scale was derived from the clinical application of the mcmaster family functioning model. The validity and reliability of the scale for use in Turkey were established by Bulut [37]. The scale consists of 60 items divided into seven subscales: Problem-solving, communication, roles, emotional responsiveness, affective involvement, behavior control and general functioning. Participants respond using a four-point Likert scale: "Strongly agree," "mostly agree," "somewhat agree" and "strongly disagree." Scores for each subscale are summed and averaged, resulting in seven subscale scores for each family member. A theoretical threshold of 2 is used as a distinguishing value, average scores above 2 are considered indicative of a shift toward dysfunction in family functioning [38].

Psychological Well-Being Scales Short Form (PWBS): The PWBS, developed by Ryff, is a self-assessment scale designed to measure psychological well-being. It was adapted into Turkish for adults by Akin et al. The PWBS-42 consists of 42 items rated on a 7-point Likert scale and is divided into six dimensions: Autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. Certain items on the scale (items 3, 5, 8, 10, 13, 14, 15, 16, 17, 18, 19, 23, 26, 27, 30, 31, 32, 34, 36, 39 and 41) are reverse-scored. The total score ranges from a minimum of 42 to a maximum of 294. Higher scores on each subscale indicate a greater degree of the characteristic measured by that subscale. Additionally, the scale provides an overall psychological well-being score. Adaptation studies have demonstrated that the PWBS-42 has adequate psychometric properties [39].

Personal information form: This form, developed by the researcher, includes questions regarding the gender, age, and family cohesion status of gifted high school students.

Education and group process evaluation form: Designed by the researcher, this 7-point Likert-type form aims to measure participants' satisfaction with the education and group process. It consists of 20 questions, with a maximum possible score of 140.

Data analysis

The data were analyzed using SPSS 22 software. Non-parametric tests, including the kruskal-wallis and wilcoxon tests, were employed for statistical evaluation. Normality was assessed based on Shapiro-Wilk values.

RESULTS AND DISCUSSION

The dependent variables of the study consist of the results of the family assessment scale and the short form of the psychological well-being scale. The independent variables include the age, gender, family cohesion status, future career aspirations of the sample group and the results of the group process evaluation form.

When the data in Table-1 are examined, it is understood that the

dependent variables do not exhibit a normal distribution according to the Shapiro-Wilk analysis ($p > 0.05$). Therefore, the wilcoxon test, a non-parametric test, was used for statistical analysis (Table 1).

The initial and final measurements of the psychological well-being scale short form administered to the 12 students participating in the program were tested using the wilcoxon signed ranks test. Upon examining the data in Table 3, a significant difference was found in terms of the total score ($p < 0.05$). This result suggests that the psychological well-being training may have a positive impact on the level of psychological well-being. When evaluating the subscales of the psychological well-being scale short form, it was observed that a significant difference was found only between the initial and final measurements of the autonomy subscale (Tables 2 and 3).

The initial and final measurements of the family assessment scale administered to the 12 students participating in the program were tested using the wilcoxon signed ranks test. Behavior control assesses the ways in which families establish and maintain behavioral standards for their members. No differences were observed in student perceptions of their families in the other subscales. Overall, according to the data in Table 4, there was no positive change in students' evaluations of their families. According to the data in Table 5, a significant difference was found in the behavior control subscale ($p < 0.05$). This suggests that the psychological well-being training had an impact on the family assessment scale only in terms of behavior control. A mean score of 2 or above indicates a negative perception and the average scores for all subscales of the family assessment scale remained above 2 in both the pre-test and post-test measurements. The family factor is a significant element in psychological well-being. Negative perceptions of their families put adolescents at a disadvantage in terms of psychological well-being. The absence of a significant difference between the initial and final measurements suggests two possible explanations. First, students may have evaluated their families without perceptual distortion. If no structural changes occurred within the family during the 8-week period, the lack of change is understandable. Second, the training may not have had an impact on unrealistic family perceptions, which is reasonable given that altering family perceptions was not the primary goal of the program (Tables 4 and 5).

Table 1: Understood that the dependent variables do not exhibit a normal distribution according to the Shapiro-Wilk analysis ($p > 0.05$).

Normality test	Kolmogorov-smirnova			Shapiro-wilk		
	Statistic	Degrees of Freedom (DF)	Significance	Statistic	Degrees of Freedom (DF)	Significance
FAS initial measurement/problem solving	169	12	200	949	12	622
FAS initial measurement/communication	118	12	200	960	12	790
FAS initial measurement/roles	131	12	200	962	12	808
FAS initial measurement/emotional responsiveness	165	12	200	889	12	114
FAS initial measurement/affective involvement	149	12	200	912	12	227
FAS initial measurement/behavior control	159	12	200	950	12	637
FAS initial measurement/general functions	174	12	200	935	12	433
FAS final measurement/problem solving	135	12	200	938	12	476

FAS final measurement/ communication	132	12	200	958	12	753
FAS final measurement/roles	187	12	200	912	12	228
FAS final measurement/emotional responsiveness	233	12	70	861	12	51
FAS final measurement/affective involvement	158	12	200	966	12	866
FAS final measurement/behavior control	166	12	200	950	12	636
FAS final measurement/general functions	141	12	200	932	12	400
PWBS total score initial measurement	171	12	200	920	12	290
PWBS total score final measurement	235	12	66	876	12	78
Pwbs/autonomy initial measurement	208	12	158	910	12	211
Pwbs/autonomy final measurement	198	12	200	935	12	440
Pwbs/environmental mastery initial measurement	133	12	200	973	12	941
Pwbs/environmental mastery final measurement	172	12	200	945	12	563
Pwbs/personal growth initial measurement	173	12	200	951	12	658
Pwbs/personal growth final measurement	183	12	200	872	12	70
Pwbs/positive relations initial measurement	321	12	1	838	12	26
Pwbs/positive relations final measurement	144	12	200	970	12	910
Pwbs/purpose in life initial measurement	290	12	6	881	12	90
Pwbs/purpose in life final measurement	220	12	113	904	12	181
Pwbs/self-acceptance initial measurement	147	12	200	951	12	656
Pwbs/self-acceptance final measurement	167	12	200	887	12	108

Table 2: Psychological well-being scale average scores.

	Sample size (N)	Mean	Standard deviation	Minimum	Maximum
PWBS total score initial measurement	12	16.10.833	44.68.162	71	212
PWBS/autonomy initial measurement	12	2.11.667	7.94.107	7	32
PWBS/environmental mastery initial measurement	12	2.58.333	8.51.558	11	42
PWBS/personal growth initial measurement	12	2.95.000	9.36.628	12	4200
PWBS/positive relations initial measurement	12	3.03.333	9.24.744	9	40
PWBS/purpose in life initial measurement	12	3.05.833	7.66.881	16	40
PWBS/self-acceptance initial measurement	12	2.36.667	10.32.502	9	40
PWBS total score final measurement	12	17.11.667	48.29.612	80	224
PWBS/autonomy final measurement	12	2.39.167	8.90.820	12	39
PWBS/environmental mastery final measurement	12	2.55.833	7.68.065	13	37
PWBS/personal growth final measurement	12	3.32.500	12.07.646	13	46
PWBS/positive relations final measurement	12	3.15.000	9.90.409	12	46

PWBS/purpose in life final measurement	12	3.10.000	7.47.116	16	41
PWBS/self-acceptance final measurement	12	2.59.167	10.76.576	9	38

Table 3: Comparison of initial and final measurements of the psychological well-being scale.

	Pwbs total score final and initial measurement	Pwbs/autonomy final and initial measurement	Pwbs/environmental mastery final and initial measurement	Pwbs/personal growth final and initial measurement	Pwbs/positive relations final and initial measurement	Pwbs/purpose in life final and initial measurement	Pwbs/self-Acceptance final and initial measurement
Z	-2.091 ^b	-1.961 ^b	-4.11 ^c	-1.828 ^b	-8.65 ^b	-7.18 ^b	-1.221 ^b
Asymp. Sig. (2-tailed)	0.36	0.5	6.81	0.68	3.87	4.72	2.22

Note: A wilcoxon signed ranks test.

Table 4: Family assessment scale average scores.

	Sample size (N)	Mean	Standard deviation	Minimum	Maximum
FAS initial measurement/problem solving	12	27.333	97.313	1	4
FAS initial measurement/communication	12	24.7	92.726	1.11	4
FAS initial measurement/roles	12	24.767	75.475	1.1	3.54
FAS initial measurement/emotional responsiveness	12	24	1.01.141	1	3.66
FAS initial measurement/affective involvement	12	23.783	31.258	1.71	2.71
FAS initial measurement/behavior control	12	21.175	38.53	1.44	2.77
FAS initial measurement/general functions	12	25.4	1.01.533	1	3.91
FAS final measurement/problem solving	12	25.95	97.983	1	3.83
FAS final measurement/communication	12	24.5	81.466	100	3.55
FAS final measurement/roles	12	25.217	79.465	1.27	3.63
FAS final measurement/emotional responsiveness	12	26.358	1.08.082	1.33	4
FAS final measurement/affective involvement	12	23.9	38.572	1.71	3
FAS final measurement/behavior control	12	23.308	45.852	1.44	3

Table 5: Comparison of initial and final measurements of the family assessment scale.

	FAS initial and final measurement/problem solving	FAS initial and final measurement/communication	FAS initial and final measurement/roles	FAS initial and final measurement/emotional responsiveness	FAS initial and final measurement/affective involvement	FAS initial and final measurement/behavior control	FAS initial and final measurement/general functions
Z	-1.070 ^b	-2.23 ^b	-538 ^c	-1.608 ^c	-1.02 ^c	-2.637 ^c	-222 ^c
Asymptotic significance (2-tailed)	2.85	8.23	5.91	1.08	9.19	0.08	8.24

According to the Kruskal-Wallis test results of the dependent variables, namely the psychological well-being scale short form and the family assessment scale, it was found that the variables of age, gender, career aspirations and family cohesion status did not cause significant differences and these independent variables did not have a meaningful impact on the results.

At the end of the training, the group evaluation scale was administered to the participating students and the results were analyzed using the related samples wilcoxon rank test. The maximum possible score on the group process evaluation form is 140, with the group average calculated as 126.75. According to the data in Table 6, a significant difference was found. Students with higher group process evaluation scores showed more meaningful differences between their pre-test and post-test results compared to others. This suggests that perceiving the training and group process positively may have a favorable impact on psychological well-being levels (Table 6).

According to the data in Table 7, students who had a positive perception of the communication subscale in the initial measurement of the Family Assessment Scale (FAS) were found to have significantly higher psychological well-being levels, as determined by the Kruskal-Wallis test ($p < 0.05$). This suggests that perceiving family communication positively may contribute to psychological well-being (Table 7).

According to the data in Table 8, students who had a positive perception of the emotional responsiveness subscale in the initial measurement of the FAS were found to have significantly higher psychological well-being levels, as determined by the Kruskal-Wallis test ($p < 0.05$). This suggests that a positive perception of the ability to express emotions and support for emotional sharing within the family may contribute to psychological well-being (Table 8).

According to the data in Table 9, students who had a positive perception of the communication subscale in the initial measurement of the FAS were found to have significantly higher levels of environmental mastery, personal growth and self-acceptance, which are subdimensions of psychological well-being, as determined by the Kruskal-Wallis test ($p < 0.05$). This suggests that a positive perception of family communication may contribute to the development of skills such as establishing environmental mastery, engaging in activities that support personal growth and enhancing self-acceptance. Additionally, students who had a positive perception of the roles subscale in the FAS scored significantly higher in the purpose in life subdimension of psychological well-being, according to the Kruskal-Wallis test ($p < 0.05$). This indicates that a positive perception of role distribution within the family and the ability to take on responsibilities associated with those roles may contribute to the formation of a sense of purpose in life, a key aspect of psychological well-being. Students with a positive perception

of the emotional responsiveness subscale of the FAS were found to have significantly higher levels in the subdimensions of psychological well-being, including environmental mastery, personal growth, purpose in life and self-acceptance, according to the Kruskal-Wallis test ($p < 0.05$). This suggests that a positive perception of the ability to express emotions and share feelings within the family contributes to skills such as establishing environmental mastery, engaging in activities that support personal growth, forming a purpose in life and enhancing self-acceptance. Furthermore, students with a positive perception of the behavior control subscale scored significantly higher in the environmental mastery and purpose in life subdimensions of psychological well-being, as determined by the Kruskal-Wallis test ($p < 0.05$). This indicates that a positive perception of establishing and maintaining behavioral standards within the family may contribute to skills related to environmental mastery and forming a purpose in life. Lastly, students who had a positive perception of the general functions subscale scored significantly higher in the purpose in life subdimension of psychological well-being, according to the kruskal-wallis test ($p < 0.05$). This finding suggests that a positive perception of general family functions, beyond the other subscales, may support the development of a sense of purpose in life, an essential aspect of psychological well-being (Table 9).

According to the data in Table 10, students with a positive perception of the communication subscale in the final measurement of the Family Assessment Scale (FAS) were found to have significantly higher scores in the psychological well-being total score and the sub dimensions of environmental mastery, purpose in life and self-acceptance, as determined by the Kruskal-Wallis test ($p < 0.05$). This suggests that a positive perception of family communication may contribute to the total psychological well-being score and to the sub dimensions of environmental mastery, forming a purpose in life and self-acceptance. Additionally, students with a positive perception of the roles subscale scored significantly higher in the purpose in life and self-acceptance sub dimensions of psychological well-being, according to the Kruskal-Wallis test ($p < 0.05$). This suggests that a positive perception of role distribution within the family and fulfilling responsibilities may contribute to the sub dimensions of psychological well-being, specifically forming a purpose in life and self-acceptance. Students with a positive perception of the emotional responsiveness subscale of FAS were found to have significantly higher scores in the psychological well-being total score and the sub dimensions of Autonomy, environmental mastery, purpose in life, and self-acceptance, according to the Kruskal-Wallis test ($p < 0.05$). This indicates that a positive perception of the ability to express emotions and share feelings within the family may contribute to the total psychological well-being score as well as the sub dimensions of autonomy, environmental mastery, forming a purpose in life and self-acceptance (Table 10).

Table 6: The effect of group evaluation score on PPIO results.

Null hypothesis	Test	Significance	Decision
1. The median of differences between group process evaluation form and pwbs total score final measurement equals 0.	Related- samples wilcoxon signed rank test	0.1	Reject the null hypothesis

Table 7: The effect of FAS communication subscale on PWBS total score (initial measurement).

PWBS total score initial measurement	
Chi-square	4.875
Degrees of Freedom (DF)	1
Asymptotic significance	0.27

Note: ^aKruskal wallis test; ^bGrouping variable: Fas initial measurement/communication .

Table 8: The effect of fas emotional responsiveness subscale on pwbs total score (initial measurement).

PWBS total score initial measurement	
Chi-square	6.336
Degrees of Freedom (DF)	1
Asymptotic significance	0.12

Note: ^aKruskal wallis test ^bGrouping variable: FAS initial measurement/emotional responsiveness.

Table 9: The effect of fas subscales on pwbs subscales (initial measurement).

		PWBS autonomy initial measurement	PWBS environmental mastery initial measurement	PWBS personal growth initial measurement	PWBS positive relations initial measurement	PWBS purpose in life initial measurement	PWBS Self-acceptance initial measurement
FAS communication subscale	Chi-square	3.527	5.754	3.855	2.64	3.237	3.828
	Degrees of Freedom (DF)	12	12	12	12	12	12
	Asymptotic significance	0.6	0.16	50	6.07	0.72	0.5
FAS roles subscale	Chi-Square	1.866	2.65	2.915	0.66	6.606	3.191
	Degrees of freedom (DF)	12	12	12	12	12	12
	Asymptotic significance	1.72	1.04	0.88	7.97	0.1	0.74
FAS emotional responsiveness subscale	Chi-square	2.405	4.536	6.403	6.71	5.644	6.775
	Degrees of Freedom (DF)	12	12	12	12	12	12
	Asymptotic significance	1.21	0.33	0.11	4.13	0.18	0.09
FAS behavior control subscale	Chi-Square	3.118	3.836	1.244	0.09	4.21	1.235
	Degrees of Freedom (DF)	12	12	12	12	12	12
	Asymptotic significance	0.77	0.5	2.65	9.26	0.4	2.66
FAS general functions subscale	Chi-square	2.16	2.227	2.211	1.39	4.21	1.681
	Degrees of Freedom (DF)	12	12	12	12	12	12
	Asymptotic significance	6.42	1.36	1.37	7.09	0.4	1.95

Note: ^aKruskal wallis test.

Table 10: The effect of FAS subscales on PWBS subscales (final measurement).

		PWBS total score final measurement	PWBS autonomy final measurement	PWBS Environmental mastery final measurement	PWBS personal growth final measurement	PWBS positive relations final measurement
FAS communication subscale	Chi-square	6.49	3.527	6.086	3.191	1.81
	Degrees of Freedom (DF)	12	12	12	12	12
	Asymptotic significance	0.11	0.6	0.14	0.74	6.71
FAS roles subscale	Chi-square	2.337	2.631	2.895	8.76	0.07
	Degrees of Freedom (DF)	12	12	12	12	12
	Asymptotic significance	1.26	1.05	0.89	3.49	9.32
FAS emotional responsiveness subscale	Chi-square	5.545	4.1657	4.473	3.202	9.53
	Degrees of Freedom (DF)	12	12	12	12	12
	Asymptotic significance	0.19	0.41	0.34	0.74	3.29

Furthermore, students with a positive perception of the behavior control subscale scored significantly higher in the environmental mastery sub dimension of psychological well-being, as determined by the kruskal-wallis test ($p < 0.05$). This suggests that a positive perception of the establishment and maintenance of behavioral standards within the family may contribute to the level of environmental mastery, a sub dimension of psychological well-being. Students with a positive perception of the general functions subscale of the Family Assessment Scale (FAS) were found to have significantly higher scores in the purpose in life and self-acceptance sub dimensions of psychological well-being, as determined by the kruskal-wallis test ($p < 0.05$). This indicates that a positive perception of general family functions, beyond the other subscales, may contribute to the sub dimensions of psychological well-being, specifically forming a purpose in life and self-acceptance.

CONCLUSIONS

Having a high level of psychological well-being is essential for both the psychosocial and academic development of children and adolescents. Recognizing this, parents and educators, who increasingly prioritize the happiness of their children, actively seek ways to promote their well-being. These efforts have accelerated initiatives such as offering alternative courses, providing differentiated content and designing specialized environments. For gifted adolescents, achieving happiness is particularly important as it supports the development of their skills in areas of interest and fosters healthy relationships with others. Through targeted educational programs, structured adjustments and carefully planned initiatives, the happiness and overall well-being of gifted adolescents can be enhanced.

This study examined the impact of a psycho-education program developed by the researcher on the psychological well-being levels of gifted students. The comparison of the Psychological Well-Being Scale Short Form (PWBS) results before and after the program revealed a significant difference. Additionally, it was found that variables such as age, gender, career aspirations and family cohesion did not have

a significant effect on the PWBS and Family Assessment Scale (FAS) results. Based on the data, it can be suggested that activities focusing on happiness and well-being with students may contribute positively to their psychological well-being levels.

A comparison of the Family Assessment Scale (FAS) results with the Psychological Well-Being Scale Short Form (PWBS) outcomes in the initial measurement revealed that students with a positive perception of the communication and emotional responsiveness subscales of the FAS scored significantly higher in psychological well-being levels according to the kruskal-wallis test ($p < 0.05$). Students with a positive perception of the communication subscale scored significantly higher in the sub dimensions of environmental mastery, personal growth and self-acceptance. Those with a positive perception of the roles subscale had significantly higher scores in the purpose in life sub dimension. Similarly, students with a positive perception of the emotional responsiveness subscale scored significantly higher in environmental mastery, personal growth, purpose in life and self-acceptance. For the behavior control subscale, a positive perception was associated with significantly higher scores in environmental mastery and purpose in life. Additionally, students with a positive perception of the general functions subscale scored significantly higher in the purpose in life subdimension according to the Kruskal-Wallis test ($p < 0.05$).

In the final measurement, a comparison of the Family Assessment Scale (FAS) with the Psychological Well-Being Scale Short Form (PWBS) results revealed significant findings. Students with a positive perception of the communication subscale had significantly higher scores in the psychological well-being total score and the subdimensions of environmental mastery, purpose in life and self-acceptance. Those with a positive perception of the roles subscale scored significantly higher in the purpose in life and self-acceptance subdimensions. Similarly, students with a positive perception of the emotional responsiveness subscale had significantly higher scores in autonomy, environmental mastery, purpose in life and self-acceptance. Additionally, students who perceived the behavior control subscale

positively scored significantly higher in the environmental mastery sub dimension. Finally, those with a positive perception of the general functions subscale had significantly higher scores in the purpose in life and self-acceptance subdimensions, according to the Kruskal-Wallis test ($p < 0.05$).

When the initial and final measurements are evaluated, it can be concluded that individual perceptions of their families have a significant impact on their psychological well-being. This finding suggests that working on family perceptions and dynamics with individuals could be beneficial in enhancing psychological well-being levels. Gifted adolescents who positively evaluate the family assessment subscales tend to have noticeably higher levels of psychological well-being compared to those who evaluate them negatively. In particular, the communication and emotional responsiveness subscales appear to have a stronger influence on psychological well-being.

RECOMMENDATIONS

Working solely with children and adolescents is not sufficient for enhancing psychological well-being. It is believed that certain measures can be taken at the family and school levels to support the psychological well-being of gifted individuals. Providing specific training to the families of gifted children may contribute to the psychological well-being of these children and adolescents and help prevent certain psychological issues. The content of such training could include topics such as the characteristics of gifted individuals, their social and emotional development, approaches to interacting with them, healthy family communication, role distribution, emotional sharing, the importance of family support and the challenges arising from the expectations placed on these individuals.

The finding of a positive relationship between perfectionism levels and depression in gifted individuals has been reported in numerous studies. When evaluating the content of the training, it appears that the topic of perfectionism has not been adequately addressed. Therefore, adjustments to the content could include a focus on perfectionism. Additionally, providing gifted students with individual counselling or group sessions to help them establish realistic expectations, cope with stress and address perfectionism could be beneficial. Such guidance may contribute to setting more attainable goals, managing stress effectively and fostering a less competitive environment to preserve peer relationships.

Social relationships are of great importance for psychological well-being. Therefore, raising awareness among children and adolescents, whether disadvantaged or not, about friendship and communication and guiding them in challenging situations, can contribute to their social development and life satisfaction. The psychological well-being training process is believed to have positively impacted the students' social relationships and communication skills. In the group evaluation form, the highest scores given by the students were related to the improvement of social relationships.

At the end of the training, a section was provided for students to write their opinions and suggestions. Overall, the students expressed satisfaction with the training. However, their main critique was regarding the duration of the sessions. Each session lasted 1 h, which limited interaction. Extending the duration of each session to at least 2 h could allow for a more thorough explanation of the content and increased group interaction. Additionally, the 8-week duration of the program necessitated selectivity in the topics covered. Updating the

program to include 12 sessions could expand the range of topics and prevent certain subjects from being addressed only superficially.

One of the limitations of the study is that voluntary participation was considered a sufficient criterion for inclusion in the training group. The lack of a preliminary assessment for the group process prevented the formation of a homogeneous group. The only common characteristic among the participants was that they were gifted individuals. For future training programs, establishing specific standards for group inclusion would be more beneficial from a research perspective.

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