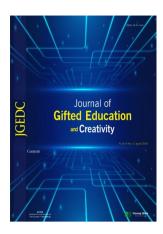
Journal of Gifted Education and Creativity

Vol: 8 No: 2 August 2021

Contents

AYSTE
Association for Young Scientists and
Talent Education • www.ayste.org





Journal of Gifted Education and Creativity (JGEDC) e-ISSN: 2149- 1410

August 2021 Issue Full File



Editor in Chief

Assoc. Prof. Hasan Said Tortop

AYSTE, Turkey, E-mail: hasansaidfen@gmail.com

Assist. Prof. Abdullah Eker

Kilis 7 Aralık University, Kilis, Turkey, E-mail: aeker38@gmail.com

Section Editors/Editors

Assoc. Prof. Suhail Mahmoud Al-Zoubi, Sultan Qaboos University, Omman, E-mail: suhailalzoubi@yahoo.com

Prof. Dr. Dawood Al-Hidabi, International Islamic University, Malaysia

Asistant Editors

Dr. Mehmet Fatih Çoşkun, Istanbul Medeniyet University, Turkey, E-mail: fatihmehmetcoskun@gmail.com Onur Ağaoğlu, Science and Art Center, Turkey

Language Review Editors

Fatma Ağaoğlu, Science and Art Center, Turkey.

Layout

Simay Akar, Istanbul, Turkey, E-mail: simayakar@hotmail.com

Editorial Board Members

Prof. Dr. Albert Ziegler; University of Erlangen, Department of Gifted Education, Erlangen, Germany. E-mail: Albert.Ziegler@fau.de

Assoc. Prof. Abu Yazid Abu Bakar, University of Kebangsaan, Department of Special Education, Bangi, Malaysia.

Email: yazid3338@ukm.edu.my

Assoc. Prof. Tahani Alebous, World Islamic Science and Education University, Jordan

Assoc. Prof. Çağlar Çetinkaya, Akdeniz University, Turkey

Prof.Dr. Hanna David, Tel Aviv University (Emirata), Israel.

Dr. Esra Kanlı, Istanbul University, Turkey.

Prof. Dr. Ann Robinson, University of Arkansas, Department of Educational Psychology, Little Rock, United State. E-Mail: Aerobinson@Ualr.Edu

| No | Title | Pages |
|----|---|-------|
| 1 | From Editorial: Is gifted education losing its value right now? | 0-0 |
| | Hasan Said Tortop | |
| 2 | Mindfulness and its relationship to social skills among gifted students | 33-55 |
| | Rodynah Alfodhly, Riham Aljafari, Malak Alabdullatif, Amal Alghamdi, Badriya Alotaibi, and Aldulhamid | |
| | Alarfaj | |
| 3 | Kızılçulu Science and Art Center' facilities, novelties, and internationalizations for gifted | 57-71 |
| | students with BUCA IMSEF competition: a case study | |
| | Cansu İlke Kuru, Belit Karaca, Meltem Gönülol Çelikoğlu, and Ümit Karademir | |
| 4 | Main issues in counselling gifted children and youths | 73-86 |
| | Hanna David | |

Absracting & Indexing

Index Copernicus, Doaj, Udledge, WorldCat, ResarchBib, EZB, Asos, Google Scholar

Young Wise Publishing

Adress 1: 63 – 66 Hatton Garden, Fifth Floor, Suite 23, EC1N 8LE, London, UK

Web site: https://youngwisepub.com/

E-mail: youngwisepublishing@gmail.com

Adress 2: Besyol Avenue Karadeniz St. No:5-7/3 Kucukcekmece -Istanbul, Turkey

Web site: http://gencbilgeyayincilik.com/ E-mail: gencbilgeyayincilik@gmail.com



Journal of Gifted Education and Creativity, 8(2), 00-00 August 2021 e-ISSN: 2149- 1410 jgedc.org



From the Editorial: Is gifted education losing its value right now?

Abstract

There are many studies on the change in the importance of gifted education throughout history. Why did nations give importance to gifted education in certain periods? So how important is this now? These issues also attract the attention of us writers. JGEDC is a platform where gifted education and creativity research are published and read. As an editor from this platform, we want to present our observations and show direction. Our editorial view on the increasing importance of gifted education and its support with congress and web applications is presented in this article.

Keywords

Gifted education, ICGYSE, giftedupoint portal

Dear Authors, Readers, Reviewers, Editors

The most enjoyable time in my life was when I was the teacher of gifted children. I worked as a science teacher for about 8 years. 5 years of this education is the period when I applied the gifted education model that I developed myself within the university. The title of this training program; Education Program For The Gifted Students' Bridge With University (EPGBU) (Tortop, 2021). While doing all these studies, while establishing 3 academic journals on the education of the gifted, my only thought was to meet the educational needs of gifted children. I will never forget this difficult but enjoyable period of my life. However, at the moment, the following question about gifted education makes me think a lot; Is gifted education losing value?

As the editor of two academic journals on gifted education, it is very difficult to answer this question in terms of being a subjective evaluation. However, it is not difficult to see the convergence of gifted education with the education of normal individuals, not only in terms of academic research but also in terms of applications. What is the reason of this?

- * First of all, with the pandemic, education must now be focused on the talented.
- * Developing technology shows more clearly what the main purpose of education is.
- * Families are no longer convinced that some institutions use gifted education to demonstrate the quality of their education services.
 - * Families are starting to become more conscious about what real gifted education should be.

All these reasons may cause a perception that gifted education studies are losing value. Although the academic events related to the education of the gifted are decreasing a little, it can be said that there is an increase in quality.

When the Journal of Gifted Education and Creativity was first established, it was publishing in the local language, Turkish. However, for the internationalization of the journal, the decision to make the publication language English was taken in the last issue of 2019. JGEDC is among the most widely read magazines for gifted education and creativity in the world. He has also succeeded in publishing the articles of important authors in this field.

I hope that our goal of making JGEDC a platform where gifted education and creativity researches are published with a wide participation will be realized with the positive result of our application to the ERIC index. We will also apply to Scopus and Web of Science indexes in mid-2020. There are not many academic journals in gifted education and creativity studies, especially in the Middle East. In this respect, it is certain that JGEDC will play a catalyst role in the increase of these researches.

We invite all our authors to the 2nd International Congress on Gifted Youth and Sustainability of the Education (ICGYSE).

Table 1.August 2021 Issue Article Review Process Data

| Articles ID | Reviewers number | Review Time (Average) | Contributions to Field | Countries |
|-------------|----------------------|--------------------------|------------------------|-----------------------|
| 947123 | 2 | 45 days | Thinking Skills | Saudi Arabia |
| 855307 | 2 | 174 days | Program Model | Turkey |
| 851943 | 2 | 171 days | Counselling | Israel |
| Total | At least 2 reviewers | 123 days | Gifted education | 3 different countries |

As seen in Table 1, articles from 6 different countries were published in the September 2021 issue, with at least 2 referee evaluations and review processes that lasted an average of 118 days, all of which would contribute to the topics in gifted education. Thanks to our referees in this review process. Academicians who want to work as referees can send an e-mail to editorigedc@gmail.com or click the reviewer request button on web site. The late referee turnaround times are 35 days and the response rate of the appointed referees is 60%.

In this issue, Rodynah Alfodhly, Riham Aljafari, Malak Alabdullatif, Amal Alghamdi Badriya Alotaibi, Aldulhamid Alarfaj from Jordan contributed their article "Mindfulness and its relationship to social skills among gifted students", Cansu İlke Kuru, Belit Karaca, Meltem Gönülol Çelikoğlu, and Ümit Karademir from Turkey contributed their article "Kızılçulu Science and Art Center' facilities, novelties, and internationalizations for gifted students with BUCA IMSEF competition: a case study ", Hanna David from Israel contributes her article "Main issues in counselling gifted children and youths".

In addition, we expect you to contribute to a very important platform for gifted education, established by our publishing house. Individual mentoring and tutoring for gifted students is encouraged on this platform. Talented mentors and gifted education workers from all over the world can share their work and mentor gifted children and their families. It is also desirable that the articles in our journal be read and reach a wider audience on this platform. You can access and register for this platform on the giftedupoint.com website.

We are working hard to ensure that JGEDC continues to be the most followed, cited, read and trend-setting academic journal in the field of education. I thank the referees, editors, authors and designers for their contributions.

Best regards
Dr. Hasan Said Tortop
Co-Editor-in-Chief of the JGEDC

References

Tortop, H.S. (2021). Education Program For The Gifted Students' Bridge With University (EPGBU) (Editors: Cristina Costa Lobo, Fernanda Hellen Ribeiro Piske, Tania Stoltz, Alberto Rocha). Identification and Enrichment Programs for Gifted Students, Germany: Lit Verlag



Journal of Gifted Education and Creativity, 8(2), 33-55, August 2021 e-ISSN: 2149- 1410 jgedc.org



Research Article

Mindfulness and its relationship to social skills among gifted students

Rodynah Alfodhly¹, Riham Aljafari²*, Malak Alabdullatif³, Amal Alghamdi⁴, Badriya AlOtaibi⁵, Abdulhamid Alarfaj⁶

King Faisal University, Saudi Arabia

Article Info

Received: 02 June 2021 Accepted: 20 July 2021 Available online: 15 August 2021

Keywords: Gifted Students Mindfulness Secondary Schools Social Skills

2149-1410/ © 2021 The Authors. Published by Young Wise Pub. Ltd. This is an open access article under the CC BY-NC-ND license



Abstract

The purpose of this mixed sequential explanatory was to identify the level of mindfulness of gifted students at the secondary stage, and the relationship of that level with social skills. The study sample was limited to gifted female students from secondary schools. The quantitative phase consists of 214 students. The study followed the correlational descriptive approach of the quantitative phase. The Pearson correlation coefficient was used to reveal the level of mindfulness of the sample. The results showed an average level on the mindfulness scale, in all grades, with a mean of (3.35). While the results of the social skills scale showed that the level of social skill was high. The results also showed a positive statistically significant relationship at ($\alpha \le 0.01$) between all dimensions of the social skills scale and the overall degree of the mindfulness scale. While the study followed the Phenomenology mothed of the qualitative stage, as this stage aimed to describe the phenomenon of mindfulness among gifted students in the secondary stage in terms of its level and its relationship to social skills. The data was collected using the focus group tool. The participants were three female teachers and six students. The results of the qualitative stage showed a high level of mindfulness among gifted students from the secondary stage, and that it was higher in the second and third secondary grades than in the first secondary grade. The qualitative results also showed a relationship between mindfulness and social skills.

To cite this article:

Alfodhly, R., Aljafari, A., Alabdullatif, M, Alghamdi, A., AlOtaibi, B., & Alarfaj, A. (2021). Mindfulness and its relationship to social skills among gifted students. *Journal of Gifted Education and Creativity*, 8(2), 33-55.

Introduction

In the face of the continuent challenges and developments in the world, states are in desperate need of their own minds and of the human cadres on which they depend; to face the problems caused by those challenges, so taking care of talented people, and developing their abilities, are the main goals of this countries to make full use of these talent to overcome problems. Adolescence is both a pleasant and cumbersome development journey, especially for talented young people who are active and creative (Hébert & Kane, 2020), and adolescent talented students have many characteristics that make them different from the others; these include the mental characteristics of its research and intellectual faculties, personal and social characteristics, and many studies point to the significant role that personal and social characteristics play in shaping talent and the need to employ mental skills; in a way that they achieves their succes in their communities (Jugeman, 2018; Al-Hawzimi and Al-Azimi, 2020; Eren et al. 2018). Mental alertness is an important and newly acquired psychological concept in research on education, where its active contribution in raising student awareness has been made clear to select appropriate externalities and thereby expand vision and enhance thinking and awareness (Youssef and Gnaim, 2019; BHINSawi, 2020) and it also helps to accept the new

PhD student, King Faisal University, Saudi Arabia. E-mail: rmsa2in1@gmail.com ORCID: 0000-0002-0666-353X

² Corresponding author. PhD student, King Faisal University, Saudi Arabia. E-mail: miss.rrr@hotmail.com ORCID: 0000-0002-4818-7498

³ PhD student, King Faisal University, Saudi Arabia. E-mail: malaakalabd@gmail.com ORCID: 0000-0003-1711-9107

⁴ PhD student, King Faisal University, Saudi Arabia. E-mail: amal.al-ghamdi@hotmail.com ORCID: 0000-0001-9105-6445

⁵ PhD student, King Faisal University, Saudi Arabia. E-mail: alqathami1@gmail.com ORCID: 0000-0002-8268-1406

⁶ Assistant Professor of Special Education, Department of Special Education, College of Education, King Faisal University, Saudi Arabia. E-mail: alarfaj1@gmail.com ORCID:0000-0002-5361-0609

without falling into the ineffective provisions (Al-Ugaili & Al-Hawab, 2019; Ali, 2018), along with enhanced empathy and compassion, alertness increases awareness and strengthens operational functions, reinforces a strong perception, and encourages innovation and intuition (Kane, 2018).

Mindfulness is important in the way it increases self-awareness, acceptance, low feedback on ideas and feelings, improves adaptive choices about responding to one's own experiences, enhances the ability to detect and manage unexpected events, and reduces distraction from desired goals (Nouri, 2012).

The lack of mental alertness can be said to lead to a concomitant view of the events that the individual is experiencing, leading to an intellectual stagnation, the lack of acceptance of different ideas and new events, which makes the individual turn in a solid circle. The mentally vigilant individual it highlights indicators of events from the beginning of their occurrence, so that it can control them within the context, and it does not limit itself to a specific view when it is confronted with them, some talented students suffer from social and emotional problems such as perfection and anxiety, and these conditions can create a cycle of stress rooted in nervousness, excitement, and ideas (Doss & Bloom, 2018). They are also more sensitive to personal conflicts and face further self-isolation and mental stress because of their well-known abilities (Heshmati & Maanifar, 2018). Therefore, the practice of alertness techniques, such as reflection, provides individuals with tools to understand the mind and body and encourages individuals not to engage in past events or to focus on future events to appreciate the present and to live today (DSS & Bloom, 2018). For talented teenagers, whose dedication provides qualitatively different life experiences, the initiation of systematic mental-vigilance practices can generate an enhanced sense of social and emotional mental health (Hebert & Kane, 2020).

On the other hand, social skills are one of the most important concerns of talented education professionals. This is because it is the basis for personal and community psychological harmony, as it plays an important role in the interaction of the individual and his surrounding environment (Alamri, 2020). In this accelerated age of events influenced by many factors that cannot be limited which make the individual need to be aware of everything around him, the ability to deal with those events and situations he is going through, and high social skills that enable him to interact and adapt positively to them. There is no doubt that these social skills depend mainly on the individual's abilities and experiences, and there is no doubt that the secondary stage is the stage of crystallization and growth of experiences, the stage of self-affirmation, orientation and future goals in which the student needs social skills that enable him to interact with the community with high efficiency. Farnham, 1993, in Mr. And Others, defined social skills as sequential behaviors that begin with a deep awareness of skill in personal relationships and tend flexibly to generate expected responses to situations, evaluate them and issue the right alternative. Crom (2016) defined it as all the psychological and mental preparations that an individual makes in response to his or her attitudes, helping him to show positive responses consistent with the nature of the situation and community culture.

Through definitions, we note that they focused on many cognitive factors such as deep cognition, evaluation of alternatives, decision-making, generation of solutions, and responses, such as the definition of Fernham, while Abdeslam's definition focused on the environmental and cultural context, while Crom pointed out the abilities that enable him to understand the situation he is going through, and the skills of responding appropriately to the nature of the situation, which corresponds to sternberg Tannenbaum and Janneh's statement that there are special capabilities affected by the surrounding environment, general capacity or general intelligence.

Social skills are linked to the individual's abilities and affect and influence the surrounding environment, so they are of the greatest importance:

- Enhances the individual's self-confidence which develops during his or her various stages of development.
- Is the key element in the building and management of social relations and the process with high efficiency.
- Avoid mental disorders by taking the appropriate method of the situations they are going through to resolve
 and deal with them in an effective and positive way (Abu Mansour, 2011).

Whenever an individual has high social skills, he adapts easily to his or her community, overcomes the difficulties he experiences without causing negative effects, enjoys high self-well-being and the ability to reach and achieve his goals easily, behavioral theory (Wahba, 2010), she sees that behaviour is an interconnected mass that can be divided into parts, representing the initial reactions associated with specific effects, and the relationship between the trigger and the reactions, a relationship based on past experiences and learning. The authors of this theory believe that behavior is the set of habits that an individual learns during the stages of his life because behavior is the result of the experiences to which the individual is exposed, so we are responsible for the observed behavior "i.e. society and the

environment" and are subject in its composition to mental processes that produce reactions according to each stimulus because behavior is subject to change and modification and we can do so through the educational and family environment. Social Learning Theory (Wahida, 2007), one of the most famous spoken by the American world (Albert Bandora) states that behavior is acquired and can be learned through observation and training. The learning process depends on internal factors and external stunts, including the multiculturalism found in the same individual society. The learned behaviour is the result of that interaction between the individual and his or her environment and this interaction is influenced by the experiences experienced by the individual and tries to model them and then call them in different situations, where direct or indirect observation of the behavior is made and then the individual develops a code of conduct to distinguish him from others, and in situations where the individual needs to call the educated behavior the codes are converted into behaviours similar to the behavior of the learner. This summons is stimulated by internal reinforcement resulting from past experiences, and through external strengthening and the resulting community and culture of the individual surrounding it. Social cognitive theory, this theory originated from the theory of social learning, which appeared in 1941 by Miller & Dollar in their book Social Learning and Tradition. This theory is based on the principles of reinforcement, punishment and model simulation. It is based on the fact that the conduct is based on an engine that causes the individual to observe the behavior of others by imitating and repeating it, when such behavior is reinforced and the motive is limited to the model and strengthens (strengthening) or weakening (punishment). Model simulation is the mechanism by which individuals acquire their different behaviors and learn their different responses, relying on strengthening children's training and teaching them different behavioral responses (Bastami, 2003). Erikson & Joan (1997) reported eight stages of healthy psychological development without having negative effects on their growth and mental health, stating that the fundamental issue of individuals in the fourth stage of school from (6-11) years is efficiency versus vulnerability, thus leading them to success with a sense of competence, while failure lead to a loss of confidence in ability and competence in adolescence (12-18 years). He stressed that the most important event at this stage is social relation and Erickson pointed out that identity as opposed to the fragmentation of the role, where the active interaction of the individual at that stage with society results in identity, thus achieving success and strength of personality, while failure at that stage leads to fragmentation of the role, poor self-understanding and personality disorder, talented people have social skills and attributes that distinguish them from others/ due to the characteristics of the talented from other peers and those skills:

- Has a high level of resistance to social pressures and those around him are not allowed to interfere in their affairs.
- Reacts with his environment highly and initiates social engagements.
- He has socially acceptable attributes and tends to keep up with the ideas and courtesy of those around him, making him highly popular.
- He has high self-confidence, tends to be independent, has an ambitious level and a high outlook.
- He has the ability to criticize himself and accepts suggestions from those around him without losing his selfconfidence.
- He has the ability to solve problems and tends to challenge and not submit to orders (Suleiman, 2005).

However, a number of talented students suffer from a weakness in the social interaction aspect due to a weakness in their social skills, which requires highlighting this aspect to meet the social and emotional issues of these students (Aziz Ab Razak, Sawai, Kasmani, Amat, & Shafie, 2021). Through the earlier presentation of mental alertness concepts, social skills and interpreted theories, we note that social skills and mental alertness may be related skills. Mcfall (1982) note that cognitive processes are included in social behavior as cognitive and mental processes affect social behavior and help build the level of social skills possessed by the individual (Al-sayed et al. 2004). The failure of some talented individuals in the situations to which they are exposed despite having high mental capacities is due to the lack of investment of opportunities, experiences and environmental factors that may affect their interaction with the surroundings and cause them some kind of social isolation that may affect their psychological aspect (Obeid, 2008). This is in line with Gardner's theory, which is used to educate talented students. Individuals with a high level of social skills have the ability to form opinions and social perception that enable them to develop strategies that determine the appropriate interaction steps and mechanisms for each social attitude (Saleh, 2011).

The study found that the social skills and Mindfulness of adolescent students need to be highlighted more, so that mental vigilance is revealed in a sample of highly talented female students in the secondary school of Al-Ahsa governorate.

Problem of Study

The nature of talent is based mainly on the lack of synchronization between capabilities and emotions, that creates for talented students different and contradictory needs that may lead to inability to social adaptation (Silverman, 2002). Talented students are also more vulnerable to mental stress due to their high cognitive ability (Heshmati, & Maanifar, 2018), especially when school environmental interventions fail to meet their diverse cognitive and psychological needs (Brody & Muratori, 2020). Although talented students possess cognitive skills that may qualify them to eliminate or reduce the impact of psychological and social pressures, also they may fail to direct those cognitive abilities to solve their problems and adapt to their societies (Szyanski, 2020).

Whether in terms of determining the appropriate scientific path and the resulting pressures, or in terms of the sensitivity of the age stage and the impact of social skills that play their role in determining identity. Mindfulness skill is considered one of the influencing metacognitive skills that recent scientific studies recommend by taking it by searching for talented students, for example (Chien-Chung Huang, et al. 2020; Malboeuf-Hurtubise, et al. 2021; Szyanski, 2020) Whereas, it helps the individual to be active and positive in his environment and with surrounding individuals (Elephel, 2019), the researchers decided to study the relationship between Mindfulness and social skills for talented high school female students in Al-Ahsa.

Problem of Study

- What is the level of Mindfulness for talented high school female students in Al-Ahsa?
- What is the level of social skills of talented high school female students in Al-Ahsa?
- What is the nature of the relationship between Mindfulness and social skills of talented high school female students?
- How can the Mindfulness for talented female students in the secondary stage be described in terms of its level and its relationship to social skills?

Method

Research Model

To answer the study questions; this study used the mixed method, which is collecting, analyzing, mixing, or combining both quantitative and qualitative data into one study (Creswell, 2002). When these methods are used together, the quantitative and qualitative methods complement each other and provide a more complete picture of the research problem (Greene, Caracelli, & Graham, 1989).

This study used the design of the (Sequential Interpretive Approach) which is based on collecting quantitative research data and analyzing it in the first stage of data collection, followed by qualitative data collection and analysis in the secondary stage, which helps explain or clarify the quantitative results obtained.

Sampling

The study community comprises all talented high school students for the second semester of the academic year 2021 in the schools of the General Administration of Education in Al-Ahsa Governorate, who passed the scale of talented detection in the Kingdom of Saudi Arabia, which is (699) talented female student.

Exploratory Study Sample: To verify the psychometric properties of the two scales, the exploratory study sample was selected in the facilitator way, and comprised (43) talented female students from the first, second, and third high school grades in Al-Hasa.

Basic Study Sample: The sample was chosen from talented female students in the secondary stage, by the random cluster method, and Steven Thompson's equation was used in (Thompson, 2012) to determine the study sample size:

$$n = \frac{N \times p(1-p)}{\left[N-1 \times \left(d^2 \div z^2\right)\right] + p(1-p)}$$

Figure 1.

Sample Size Formula

Where N is the population size, P is the probability value, d is the margin of error, and z is the standard degree. In the current study, the value of N=699, P=0.50, d=0.05, z=1.96 where z expresses the standard degree corresponding to the level of significance (0.05) and the level of confidence (0.95).

The required size according to the equation reached (248), while the sample size the researchers could get was (214) talented female students.

Table 2.Distribution of the Sample According to Grades in the Secondary Stage

| Groups | Class | N |
|---------|------------------|-----|
| Group1 | First secondary | 86 |
| Group 2 | Second secondary | 68 |
| Group 3 | Third secondary | 60 |
| Total | | 214 |

Participants in the Qualitative Stage

In the second stage (qualitative), the sample was selected to participate in the qualitative stage interviews was: (3) female teachers from the talented female students in the secondary stage in Al-Ahsa, and (6) talented female students by the main sample that participated in the answer on the scales.

Data Collection Tools

The Mindfulness Scale

MS prepared by (Baer et al. 2006) and modified on the Arab environment from (Al-Buhairi et al. 2014): The scale consists of five dimensions (observation, description, act with awareness at the present moment, non-judgment about internal experiences, non-interaction with internal experiences), and it includes (39 paragraphs), and each paragraph has 5 responses (apply fully, apply largely, apply moderately, apply little, do not apply) grades respectively (1,2,3,4,5). Validating of the MS; Baer et al. (2006) applied the scale on a sample of (113) university students. Using exploratory factor analysis, followed by confirmatory factor analysis, the results yielded a model consisting of five factors of Mindfulness (observed, description, conscious behavior in the present moment, non-judgment of internal experiences, non-interaction with internal experiences). Stability of the MS; The results showed that the scale has a good level of internal consistency, as the Cronbach alpha values ranged between (0.75 and 0.91), and the interrelationships between the five factors ranged between (0.15 and 0.34). In the study of (Al-Buhairi et al. 2014), the scale was codified on the Arab environment on a sample of (1200) male and female students from universities, and the validity was calculated through the validity of internal consistency, which showed that scale dimensions have a high degree of internal consistency with the scale. Also, through the use of confirmatory factor analysis, which confirmed of five factors which the paragraphs were saturated, and it was concluded that the indicators of matching were good. As for stability, it was calculated to Cronbach Alpha coefficient with split half method. The stability coefficients in both methods are high.

Validity of Current Study

Validation of the content; by presenting the scale to five specialized Judges in talented domain, therefor some paragraphs were modified, and without delete any phrase. Internal consistency: the validity of the scale was calculated by applying it to an exploratory sample of number (n = 43), by calculating the values of the correlation coefficients between the paragraphs degree of each dimension and the total degree of the dimension to which they belong, and 7 paragraphs were omitted because they were not a statistical function. And the values in the rest of the paragraphs were statistically significant at the level ($\alpha \le 0.01$), and the values of the correlation coefficients ranged between (0.31 and 0.86), then the researchers calculated the correlation coefficient between the dimensions of the scale and the total degree of the scale, which was a statistically significant function. At the level of ($\alpha \le 0.01$), the values of the correlation coefficient ranged between (0.44 and 0.86).

Table 4.The Values of the Correlation Coefficient between Scale Dimensions and Total Degree of the Scale (N = 43)

| Dimensions | Correlation Coefficient |
|---|-------------------------|
| Observation | 0,44** |
| Description | 0,68** |
| Acting consciously in the present moment | 0,69** |
| Lack of judgment on internal experience | 0,86** |
| Not interacting with internal experiences | 0,72** |

Function statistically** at ($\alpha \le 0.01$)

The reliability was calculated by means of the Cronbach alpha coefficient, where (number of paragraphs = 32), and the value of the Cronbach alpha coefficient for the whole scale was (0.89), which is a high value for stability. The value of the Cronbach reliability coefficient alpha was also calculated for the dimensions as shown in Table 5.

Table 5.The Values of the Reliability Coefficient for the Scale Dimensions (N = 43)

| Dimension | The value of the Cronbach alpha coefficient |
|---|---|
| Observation | 0,76 |
| Description | 0,65 |
| Acting consciously in the present moment | 0,83 |
| Lack of judgment on internal experience | 0,85 |
| Not interacting with internal experiences | 0,76 |

The key of correcting the mental alertness scale: Its final form of (32) paragraphs, the expressions of the scale are answered through a five-point answer that follows a Likert method that ranges between (fully applicable, not fully applicable), where the answer "fully applies" on five degrees, while the answer gets "It does not apply completely" to one degree if the statement is positive-directional, and vice versa in the case of the statement in negative direction, ie the answer "does not fully apply" to five degrees, while the answer "fully applies" to one degree if the statement is negative-directional. Table (3) shows the numbers of negative expressions in the dimensions of the Five Factors Scale of Mindfulness.

Table 3.Numbers of Negative Expressions on the Five Factors Scale of Mindfulness

| Factors | Items | |
|---|-----------------------------|--|
| Observation | 1, 2, 3, 4, 5, 6, 7, 8 | |
| Description | 9, 10, 11*, 12*, 13, 14, 15 | |
| Acting consciously in the present moment | 16, 17, 18, 19, 20 | |
| Lack of judgment on internal experience | 21, 22, 23, 24, 25, 26 | |
| Not interacting with internal experiences | 27, 28, 29, 30, 31, 32 | |

^{*} Negative expressions

A criterion was determined to determine the level of female students in the Mindfulness scale, according to the following equation:

The upper limit of the scale (5)-the lower limit of the scale (1) = (5-1)/3 = 1.33 the number of required categories (3) 3 and then add the answer (1.33) to the end of each category. The following criterion was determined to determine the level of students in the Mindfulness scale:

- 1-2.33 / The grade is low, 2.33 -3.66 / The grade is intermediate, 3.67-5 / The grade is large.
- The social skills scale was prepared by (Abdel Hamid, 2012), and it consists of (45 items) that form five dimensions (relationship with peers, self-management, academic skills, obedience, and affirmation), and each paragraph has three responses (always, sometimes, rarely) grades respectively (1,2,3)

The validity of the scale: The validity of the scale was calculated using the factor analysis of (45) statements representing the expressions of the scale, and the sample of analysis reached (250) individuals, the results of the factor analysis of the scale expressions showed the presence of (5) factors whose underlying root is greater than the correct one. (69.79%) of the total variance.

The validity of the internal consistency was calculated by calculating the correlation coefficient between scores of sample individuals on each of scale expressions and total degree of the dimension which belong to. The correlation values were statistically significant and ranged between (0.53 and 0.65).

Stability of the scale: (Abdul Hamid, 2012) calculated the reliability of the scale using the Cronbach alpha coefficient, and its whole value for the scale was (0.85), which is a high value.

The validity of the scale in the current study: The researchers calculated the validity of the social skills of the current study through:

- Validation of the content: by presenting the scale to five Specialized judges in the field of talent, where some
 of expressions editing was modified, and without deleted any phrase.
- Internal consistency: the validity of the scale was calculated by applying on an exploratory sample of (n = 43), by calculating the values of correlation coefficients between scores of each dimension and the degree of the dimension which they belong to, and 3 paragraphs were omitted because they were not Statistical function, The values were statistically significant at the level of (α ≤ 0.01) in the rest of the paragraphs, and the values of the correlation coefficients ranged between (0.30 and 0.75), then the researchers calculated the correlation coefficient between the scale dimensions and the total degree of the scale, and all of it were statistically significant at level of (α 01.0), and ranged between (0.07 and 0.89), as shown in (Table 6).

Table 6.The Values of the Correlation Coefficient Between the Scale Dimensions and the Total Degree of the Scale (N = 43)

| Dimensions | Correlation Coefficient | | |
|--------------------------|-------------------------|--|--|
| Relationships with peers | 0,89** | | |
| Self-management | 0,74** | | |
| Academic skills | 0,70** | | |
| Obedience | 0,79** | | |
| Assertiveness | 0,73** | | |

Function statistically** at ($\alpha \le 0.01$)

Stability of scale in the current study: The stability was calculated by means of the Cronbach alpha coefficient, where (number of vertebrae = 42), and the value of the Cronbach alpha coefficient was (0.92), which is a high value for stability. (7).

Table 7.The Values of the Reliability Coefficient for the Scale Dimensions (N = 43)

| Dimension | The value of the Cronbach alpha coefficient |
|--------------------------|---|
| Relationships with peers | 0,84 |
| Self-management | 0,77 |
| Academic skills | 0,79 |
| Obedience | 0,68 |
| Assertiveness | 0,77 |

The key to correcting the mental alertness scale: The scale is in its final form of (42) paragraphs. The expressions of the scale are answered through a triple answer that ranges between (always and rarely), where the answer "always" gets three degrees, while the answer "rarely" gets one degree. A criterion was determined to determine the level of female students in social skills scale, according to the following equation:

The upper limit of the scale (3)-the lower limit of the scale (1) = (3-1)/3 = 0.67

the number of required categories (3) 3 and then add the answer (0.67) to the end of each category. The following criterion was determined to determine the level of students in the social skills scale: 1-1.67 / The grade is low, 1.68-2.34 / The grade is intermediate, 2.35-3 / The grade is large.

Fourth: Quantitative data analysis: To answer the questions of the quantitative study, the statistical program (SPSS) was used to process quantitative data and extract results, and the following statistical methods were used:

- Arithmetic means and standard deviations.
- Pearson Correlation.

Fifth, the Qualitative Stage: Qualitative Design

This study adopted the Phenomenology approach in collecting and analyzing data, and it is one of the qualitative research methods, as both Johnson and Chirstensen (2014) refer as describing The perception or experience of an individual or group of individuals of a phenomenon, the aim of the virtual studies is to obtain an overview on the experiences of the participants (talented high school female students and female talented high school teachers) in the research, and to understand what this experience means to them.

Selection of Participants

The female students were chosen that they were included in the quantitative basic sample, in an intentional way, and their number was 6 female students, all of them from the first grade of high school except one student from the second grade of high school, and all of them enrolled in talented classes, which is

for talented students. The teachers were also chosen intentionally, they were chosen from the female teachers of talented students at the secondary level.

Qualitative Data Collection Tool

The concentrated group, which: (1) a concentrated group of six talented female students in the secondary stage was conducted through an electronic program (Zoom), (2) and a concentrated group of three female teachers for talented students in the secondary stage was conducted, also through the program Electronic (zoom). Electronic communication with the participants was considered, due to the difficulty of direct communication imposed by the Corona pandemic.

Building the Concentrated Group Questions

The content of the concentrated group questions was based on the quantitative results, because the aim of this qualitative phase is to explore and detail the results of the quantitative, where the aim was to describe the Mindfulness by its level and relationship to the social skills of talented students in the secondary stage in Al-Ahsa.

The interview consisted of two main open-ended questions, and the first question was divided into five questions. Two modules were designed from the same questions; A form for female students and a form for female teachers, as shown in Appendix 1.

Qualitative Data Collection

Data were collected from two sources to provide richness and depth using the Triangulation strategy, as both (Flick, 2000) and (Jack & Raturi, 2006) refer to five different types of data triangulation, including the use of different data sources.

It included the following: (1) Conducting a concentrated group through zoom with three teachers. (2) Conducting a concentrated group through zoom with six talented students. The researchers took care of ethical sides in data collection, as the participants were informed that they would be registered and that they would be kept the confidentiality of data, and data will be used only in scientific research, and their consent has been obtained.

Sixth: Qualitative Data Analysis

In order to analyze qualitative data, methodology of Inductive Thematic Analysis was used according to the methodology presented in (Braun & Clarke, 2006). the steps included in the qualitative analysis included the following:

Firstly; The initial exploration of the data by reviewing the transcripts; Secondly; coding the data by segmenting the text and marking it, as the symbol (T) was considered for female teachers and the symbol (S) for female students; Thirdly; the symbols verification By verifying agreement between female researchers; Fourthly; Using symbols to develop topics by grouping similar symbols with them; Fifthly; Connecting and linking topics; Sixthly; Preparing a narrative for the interview analysis that consisting of descriptions and themes; and seventhly; Thematic analysis for cases.

Reliability was verified through a triangulation of information sources, (1) female talented students' teachers, and (2) female students who were selected from the quantitative sample.

Procedure

This study used the design of the (Sequential Interpretive Approach) which is based on collecting quantitative research data and analyzing it in the first stage of data collection, followed by qualitative data collection and analysis in the secondary stage, which helps explain or clarify the quantitative results obtained. Table (1) shows the procedures for implementing the method:

Table 7.Procedures For Implementing The Mixed Methodology Using The Sequential Explanatory Design Method

| Steps | Stage |
|-------------------------------------|--|
| Collect Data from | Collect quantitative data |
| | |
| Check data | Quantitative data analysis |
| SPSS Program | |
| (Arithmetic means, standard | |
| deviations, and Pearson correlation | |
| coefficient) | |
| Choose participants | |
| Choose participants | Selection of interview participants |
| | (focus group) |
| Development of interview | Collect qualitative data |
| questions | |
| Concentrate group via Zoom | |
| program with 4 Teachers talented | |
| female students | |
| The concentrate group through the | |
| Zoom program with 6 Talented | |
| female students | |
| Objective analysis Coding and | Analyze qualitative data |
| inductive | |
| | |
| | |
| (Themes development, analysis by | |
| themes) | |
| Interpret and explain quantitative | Incorporate the results of |
| and qualitative results | quantitative and qualitative data |
| | |
| | Check data SPSS Program (Arithmetic means, standard deviations, and Pearson correlation coefficient) Choose participants Choose participants Development of interview questions Concentrate group via Zoom program with 4 Teachers talented female students The concentrate group through the Zoom program with 6 Talented female students Objective analysis Coding and inductive (Themes development, analysis by themes) Interpret and explain quantitative |

Second, Study Community and Sample: The study community comprises all talented high school students for the second semester of the academic year 2021 in the schools of the General Administration of Education in Al-Ahsa Governorate, who passed the scale of talented detection in the Kingdom of Saudi Arabia, which is (699) talented female student.

Exploratory Study Sample: To verify the psychometric properties of the two scales, the exploratory study sample was selected in the facilitator way, and comprised (43) talented female students from the first, second, and third high school grades in Al-Hasa.

Basic Study Sample: The sample was chosen from talented female students in the secondary stage, by the random cluster method, and Steven Thompson's equation was used in (Thompson, 2012) to determine the study sample size:

$$n = \frac{N \times p(1-p)}{\left[N-1 \times \left(d^2 \div z^2\right)\right] + p(1-p)}$$

Figure 2.Sample Size Formula

Where N is the population size, P is the probability value, d is the margin of error, and z is the standard degree. In the current study, the value of N=699, P=0.50, d=0.05, z=1.96 where z expresses the standard degree corresponding to the level of significance (0.05) and the level of confidence (0.95).

The required size according to the equation reached (248), while the sample size the researchers could get was (214) talented female students, and Table (2) shows the distribution of the sample according to grades in the secondary stage.

Table 8.Distribution of the Sample According to Grades in the Secondary Stage

| Groups | Class | N |
|---------|------------------|-----|
| Group1 | First secondary | 86 |
| Group 2 | Second secondary | 68 |
| Group 3 | Third secondary | 60 |
| Total | | 214 |

Results

First Quantitative Phase

The answer to the first question: What is the level of Mindfulness for talented female students in the secondary stage in Al-Ahsa?

To answer this question, the arithmetic means and standard deviations of the dimensions for the Mindfulness scale were used, as shown in Table (8) and (9).

Table 9.The Arithmetic Means, Standard Deviations, and the Order of the Degree for Mindfulness (N = 214)

| Dimension | Order | Level | Standard | Arithmetic |
|---|-------|---------|-----------|--------------|
| Difficusion | | LCVCI | deviation | mean |
| Observation | 1 | High | 0,62 | 4,27 |
| Description | 2 | Average | 0,89 | 3,47 |
| Acting consciously in the present moment | 3 | Average | 0,89 | 3,3 0 |
| Lack of judgment on internal experience | 5 | Average | 0,90 | 2,52 |
| Not interacting with internal experiences | 4 | Average | 0,78 | 3,27 |
| Total | | Average | 0,39 | 3,35 |

Table 9 indicates that the level of Mindfulness for talented female students was average, with an arithmetic mean of (3.35). The arithmetic means of the dimensions ranged from (2.25) to (4.27). The arrangement of the dimensions according to the arithmetic averages as following:

(Observation - description - acting consciously in the present moment - lack of interaction with internal experiences - description - non judging internal experiences) with arithmetic averages (4.27-3.47-3.30-3.27-2.52), respectively.

Table 10.The Arithmetic Means, Standard Deviations, and the Order of the Degree of Mindfulness by Grades (N = 214)

| Class | Order | T1 | Standard | Arithmetic |
|------------------|-------|---------|-----------|------------|
| Class | | Level | deviation | mean |
| First secondary | 3 | Average | 0,38 | 3,29 |
| Second secondary | 2 | Average | 0,44 | 3,37 |
| Third Secondary | 1 | Average | 0,34 | 3,41 |
| Total | | C | | |

Table 10 indicates that the level of Mindfulness was average in all classes, in the following order: (third secondary, second secondary, first secondary).

The answer to the second question:

What is the level of social skills of talented female students in the secondary stage in Al-Ahsa?

To answer this question, the arithmetic means and standard deviations of the dimensions for the social skills scale were calculated, as shown in Tables 11 and Table 12.

Table 11.Arithmetic Means, Standard Deviations, And Social Skills Score Order (N = 214)

| Dimension | Order | Level | Standard | Arithmetic | |
|--------------------------|-------|---------|-----------|------------|--|
| - D. L | | T T' 1 | deviation | mean | |
| Relationships with peers | 2 | High | 0,45 | 2,42 | |
| Self-management | 4 | High | 0,42 | 2,38 | |
| Academic skills | 3 | High | 0,40 | 2,39 | |
| Obedience | 1 | High | 0,46 | 2,46 | |
| Assertiveness | 5 | Average | 0,50 | 2,21 | |
| Total | | High | 0,37 | 2,37 | |

Table 11 indicates that social skills level for talented female students was high, with an arithmetic average of (2.37). The arithmetic means of dimensions ranged from (2.21) to (2.46). The arrangement of the dimensions according to the arithmetic means following:

(Obedience - relations with peers - academic skills - self-management - assertiveness) by arithmetic averages (2.46-2.42-2.39-2.38-2.21) respectively.

Table 12.The Arithmetic Means, Standard Deviations, and the Order of the Degree for Social Skills by Grades (N = 214)

| Class | Order | Level | Standard | Arithmetic | |
|------------------|-------|-------|-----------|------------|--|
| | | Level | deviation | mean | |
| First secondary | 3 | High | 0,37 | 2,28 | |
| Second secondary | 2 | High | 0,42 | 2,39 | |
| Third Secondary | 1 | High | 0,29 | 2,47 | |
| Total | | | | | |

Table (2 indicates that social skill level was high in the second secondary and third secondary grades, and intermediate in the first secondary grade, according to the following order: (third secondary, second secondary, first secondary).

The answer to the third question:

What is the nature of the relationship between Mindfulness and social skills for talented female high school students in Al-Ahsa Governorate? To answer this question, the correlation coefficients between Mindfulness and social skills of talented female students were calculated, and Table 13 shows that.

Table 13.The Correlation Coefficient Between Mindfulness and Social Skills for Talented Female Students (N = 214)

| Dimensions | Relationships with peers | Self- management | Academic skills | Obedience | Assertiveness | Total value SSS |
|---|-----------------------------|---------------------|--------------------|-----------|---------------|--------------------|
| Observation | 0,39** | 0,38*** | 0,29** | 0,33** | 0,34** | 0,42** |
| Description | 0,39** | 0,16 | 0,17* | 0,18** | 0,47** | 0,38** |
| Acting consciously in the present moment | 0,19** | 0,11 | 0,22** | 0,23** | -0,01 | 0,17* |
| Lack of judgment on internal experience | 0,02 | -0,15* | -0,38 | -0,38 | -0,002 | -0,33 |
| Not interacting with internal experiences | -0,10 | 0,09 | 0,10 | 0,14* | 0,08 | 0,45 |
| Total value | 0,37** | 0,19** | 0,27** | 0,30** | 0,37** | 0,38** |

^{**} Statistically significant at ($\alpha \le 0.01$), * Statistically significant at ($\alpha \le 0.05$) MC: Mindfulness Scale SSS: Social Skills Scale

It is clear from the previous table that: There is a positive statistically significant relationship at ($\alpha \le 0.01$) between total value on the Mindfulness scale and the total value of the social skills scale. There is a positive statistically significant relationship at ($\alpha \le 0.01$) between the two dimensions of (observation, description and the total value of the social skills scale. There is a positive statistically significant relationship at ($\alpha \le 0.05$) between the dimension of (acting consciously in the present moment) and the total value of the social skills scale. There isn't any statistically

significant relationship between the two dimensions (lack of judgment on internal experiences and no interaction with internal experiences) and the total value of the social skills scale. There is a positive statistically significant relationship at ($\alpha \le 0.01$) between all dimensions the social skills scale and the total value on the Mindfulness scale

Second, the qualitative stage:

The answer to the fourth question: How can the Mindfulness for talented female students in the secondary stage be described in terms of its level and relationship to social skills? To answer this question, two open question models are designed. The first model (female teacher model) for Concentrated group for talented female students in the secondary stage. The second model (female student model) for Concentrated group for talented female students in the secondary stage. Each model included only two basic questions, and sub-questions for the first question only of both models. It falls under first question; five questions for each model.

After collecting, recording and unpacking data, the results of Concentrated group for each of the students and teachers were analyzed, depending on the methodology of Inductive Thematic Analysis, according to Braun & Clarke (2006) - by finding the symbols first, then, through processing the symbols, generating categories, extracting topics, and forming topic map.

The results of the analysis revealed that there are four main topics related to Mindfulness from both teachers and students' views. Thus, the study's question was answered, by aiming to arriving at a description of Mindfulness with its level and relationship to social skills within each of these topics that were reached, and then reaching a full understanding of the phenomenon in all sides.

Topic one, the age stage: The statements of the participants from female teachers revealed that the age stage is related to the level of Mindfulness. As T1 mentioned in her discussion of observation, which is one of dimensions Mindfulness dimensions; "With regard for first secondary school, stage starts without been formed where there is a dispersion due to the transition from the intermediate stage ... The female students in the first-grade secondary will be dispersed ... maybe at the end of the second semester ... but from the second and third secondary grades, she has a strong note." The testimonies of the female students also revealed that there is a relationship between Mindfulness (after the observation) and the age stage, as S1 indicated a complete change in her perception of society than it was when she was younger. "I did not pay attention to people or the world around me, my remark was bad .. I changed 180 degrees and began to notice things and people." ...

As for the relationship of Mindfulness and social skills, for female teachers, T1 indicated that female students in the second and third secondary grades are more willing to appear socially. "... But in the second and third grades, a student begins to appear in the lights." In her talk about social self-management, T2 mentioned, "As for the secondary stage, i expect that they will have a higher awareness than their peers in the elementary and intermediate stage, their sensibility and feelings are clear to them ... and we can feel it too and female student can appreciate it, and the teacher can notice them ..." As for T3, although it believes that there is another factor more influencing Mindfulness than the age stage, However, she supported T1 and T2, and talked about the female students 'interaction with their peers and the frequent quarrels between them, as she said: " probably concentrate stage that is the third. Her thinking began to be concentrated her feelings too. She started to control that what is important is my behavior, not one else"

As for the participating female students, S2 reported a change in her self-confidence - as it was stated in the theoretical framework that she is considered among the social skills - from what she was when she was younger. "Before, I used to trust myself blindly, but a while ago it changed .. I felt there are people better than me ... and I blamed myself and I felt that there are always people who are better than me ... During this period, I started to return and change myself, but it is not like S1 180 degrees ... I reached for good result, and I need to work on myself more and this is difficult. "...

Thus, the results show that the age stage affects the level of Mindfulness, as it appears that the level of Mindfulness of students in the second and third secondary grades is higher than the first grade of secondary school. The results also showed a positive correlation with progression in secondary school grades between Mindfulness and social skills.

Theme 2. The environment or the Social Environment

This main topic consists of three sub-topics, which are as follows.

The Role of the Family

T3 strongly emphasized the role of the family, and differentiated between the Mindfulness of talented female high school students from aware families and unaware families. As she mentioned about the student's ability to observe, and understanding herself and her talent. The student's environment... is what determines whether the student choose

her experience or not. I notice that in two parts: the girl who comes from a house is someone interested in her talent, the girl is vacillating. but who comes from an environment in which the faithful and her supporters for a long time And Encourage her, she defined her experience, by understanding herself and her talent...

". She also added in her talk about a family that is not aware of talent, "The girl that I'm suffering with is the one that no one has to direct her, and we tire with parents ... Some of them say we do't want her to go into this thing, leave her in her school please" this talk is supported from both T1 and T2, and from that T2 mentioned: "Some of them receive strong support from their family."

T1 also talked about the effect of family problems on the mental alertness of talented female high school students, as she said:

"There are female students who have problems. I remember one of talented female students with creative ideas. Once upon a time we had an activity that I felt she was not natural, and every time I spoke to her felt that she was distracted. When I asked her for a topic, she responds definitively, I asked her for the second time and the third time her tears fell and started crying, the girl was unnaturally distracted. "...

While in students' statements there was no talk about the role of the family in their Mindfulness level, only two indirect indications. The first is through S2 's talk, when she mentioned that she is ashamed of expressing her feelings for her parents, so she said:

"some people we have difficult to expressing for them, especially my mother and father, I feel that I'm shy ...". And the second, S3, when she mentioned that she disclosed her feelings to her sister and said: "Only my sister understands me."

Regarding the relationship of Mindfulness and social skills about the role of the family, I spoke in T2 and mentioned: "Mindfulness can be developed with psychological and social care. Whatever there is, family, psychological and social care for the talented student has led to the development of Mindfulness and thus increased his social skills" As for the female students, there was no discussion about this in their statements.

Therefore, the results confirm that the mental alertness level is higher for female students who belong to conscious families, and families contain (parents or siblings) that they have a desire to contain the talented student. Also, pressures and family problems cause a decrease in Mindfulness level. relationship between Mindfulness and social familial skills are an interactive relationship, each one affects and is affected by the other.

The Role of the School

T2 talked about the teachers 'awareness of the concept of talent and talented students with their low achievement, and relationship of low achievement with school boredom, through an experience that she noticed, as you mentioned;

"There are talented female students and you see them participating in the Creativity Olympiad. Mashallah, wonderful I was surprised and all the teachers were too, their level is good, not superior, how she is a talented student, and her level is average, and I touted her she has good level. Sometimes she sleeps in the class, but she is talented ... The thing that we present to her in the class may be wasn't attracted her attention that is commensurate with her ambitions ... So I sought an excuse for her even though everyone (the rest of the teachers) criticized her ..."

As for T1, she mentioned two positions of the teacher citing through them that the teacher may play an important role in raising or lowering the level of Mindfulness for the female students, the first situation in which she mentioned her personal experience with one of the female students and she said;

'I had a student in the first secondary school who was unresponsive to me in the second secondary school ... I was asking her to aspire (produce a product as a director for a program based on the STEM methodology) From the STEM class in my research activity, the girl was not satisfied except when I told her that you are more benefit the community and everyone will be pointing you and you will be poplar. The student moved and actually got the second place at the level of Al-Ahsa Governorate and won innovation."

As for the second position mentioned by T1, she mentioned that the student was not able to submit a search she was working on it, where she was reprimanded by a female teacher as a result of a misunderstanding, in the she continued; The reason is the dispersion that came on her ... from her teacher, because the girl became distracted, so she was unable to do the work and not engage in it. this was a real experience and truth. "

The role of the student counselor also emerged in the T2 talk, during her speech, where she talked about the reasons for the low Mindfulness level for talented female students, and she said:

"probably be embarrassed is the reason, but if you embrace her, and from reality of contact with the student counselor you will know about her secrets, that you didn't know about it, so it makes her express her feelings. You expect that she is shy while it is for other reasons". As for the role of the student counselor from the reality of the students' conversation, it came in a S5 conversation about the unwillingness to disclose expression feelings, due to the fear of the reaction of others, she mentioned; "... I tried to speak with the student counselor, but I did not see any benefit, so I felt it wasn't necessary".

In addition, there was talk about the stigma of talent (i.e., called the student talented) and peer pressure, where T3 said:

"Emotions pushed a girl to hysterical crying because of the force of pressure on her, and when I ask her about the reason (the girl says I feel that we the talented people we are imposed to be perfect in anything in our life like that you are talented. No, you are not talented, so you are not supposed to make mistakes ... Instead of loving her talent, they let her hate it) as she added also; "Sometimes the student of those who are her peers bully on he and her talent she hated this so she does not want to talk or make attention to her. I am a normal person, the same of any one of my classmates.

On the other hand, she mentioned about the influence of peers in enhancing the desire to reveal inner feelings, so she mentioned S2

"As for my friends, I can express for them ...", and S6 indicated that she expresses her feelings to "the close circle of friends only." Also, she mentioned that she expresses through written texts that she gives to her friends for help her understand herself, "My close circle is my friends who know everything".

The relationship between Mindfulness and social skills by the role of the school appeared in the talk of the three female teachers, for example T1 stated:

"Whatever the student is aware, and far from these problems, her mind will be clear and not dispersed. She will have social relationships and skills, and will be aware in her relationships with her colleagues and in her project leadership and any subject she is given,"

T2 and T3 similar to that.

It can be concluded from above, that the Mindfulness level may increase as a result of the good and studied behavior of the teacher and student counselor, and it may decrease or not change upon emotion or departure from the positive role of each of them. Peers can also have a role in reducing the Mindfulness level alertness. but close friends, they often have a positive effect in raising the Mindfulness level. The results also showed that the title of talented (the talent stigma) could negatively effect on talented student, thus reducing her Mindfulness level, and the results also revealed a relationship between Mindfulness and social skills by school role.

Social Media

Only, S5'talk included and she said:

"presumably if social media is the reason for my distraction, I can delete it for a certain period, close it and continue my work, or as my friend said, sometimes there are things that we are supposed to settle, but we do not know what to accomplish it and we still thinking about them all the time".

This reveals that communication media may be a reason for lowering Mindfulness level.

Theme 3. Metacognitive Thinking

According to data analysis, it includes two main topics.

Experience

During the dialogue with the female teachers, there was no discussion that referred to the experiences. On the other hand, a number of female students showed the sign of interactions with painful and successful experiences. As T2 mentioned,

"I do not think about the painful past events and I do not know why ... I feel my mind is ignoring it. We can hardly think of some things, for example, something between me and my friend has become a normal problem ... and I continue my life while I am not intentionally, but my mind ignores it ... S3 Also, mentioned a similar saying in terms of ignoring the bad experience, except that it differs from the point of awareness of it, which is: "For me, I do not feel my feelings restrict me because I feel feelings in their moment, and then it ends, whether it is sadness or joyful ...".

As for S4, she distinguished between her interaction with positive experiences and negative experiences, as she said:

"Feelings definitely affect me, but what is constraining me and over thinking about the feeling, for example, if my feelings were positive, then I would have a great passion to settle everything at that moment ... and if my feelings were negative, I would like to work and start doing anything that helps me because I always remember that this feeling withdraws after a short while ... ".

As for dealing with experiences of failure, it was evident in the S6's talk, she said:

"once upon a time, which I'm regretted it for this time, because of an opportunity I missed, I stayed for two months doing nothing, just because of a one opportunity I lost my two months, I still regretted and lost more opportunities, and after that I checked myself out, and that regret doesn't make anything worthy and doesn't benefit but it harms. ... and this thing made me, when I regret about anything, remember what happened in the last period and left remorse. "...

There was no evidence from the participating female teachers indicating the relationship of Mindfulness to social skills by dealing with experience. Whereas, the talk was mentioned about that by S4 when she talked about the relationship between them, and the effect of the interaction between them in solving problems and thus forming practical and practical experience;

"Sure, it has a big side to social relations, as it allows me to interact better and know how to behave ... and it makes me truly aware of the reality of things more so that I seek it to help me solving problems ... and this helps avoiding all the pitfalls in order to make me climb to the top .. And to be succeeded in everything in my scientific or practical life".

S5 mentioned a long speech, she supported what S4 mentioned, then I talked about the different customs, traditions, mentalities and ways of people thinking, by making a high level of Mindfulness a necessity to understand behavior at the right time, she was concerned that these differences in customs, traditions and mentalities might make learning social skills difficult, she said about it;

"Now I try to link Mindfulness with social skills, and I feel that our Mindfulness is useful with society, especially that we have a difference in customs and traditions, and different types of people, by mentalities and personalities ... For example, if we learn skills or ideas or tricks about how we deal with people, sometimes they are not suitable for all people's personalities ... there are many types of personalities, and these personalities of people doesn't match the specifications that they need by trick to benefit or the behaviors themselves, the person is lost and I feel that social skills are a difficult thing.

Self-regulation

There was no discussion about self-regulation in the female teachers 'dialogue. While their dialogue of the students, there is a lot of talking about adapting to distractions and self-correcting, S1 mentioned;

"the person tries to adapt to it, so it differs from a person to another. As I said about myself, I am one of the people that disperses quickly ... some people adapt and perform its work excellently, even with these distractors, it depends on the person himself and his Mindfulness and varies from person to another. Your options and the things and decision that challenged you in these behaviors ... ",

as S1 also indicated to self-regulation in her talk about directing her failed experience to be a reason for achieving development.

"I feel there is a mistake and know these but something that helps me to develop myself, and no matter I accomplished, I feel that I am deficient and this is something that drives me more than it hurts me, and I do not destroy myself because of something that makes me depressed, like that I have no hope, the opposite it motivates me more I motivate from any person.

Also, S1 spoke about discipline at work and time, she said:

"When I am in the some work with high importance, as soon as distractions are high, such as my commitment to this work, the discipline that I have will be more ... I am that type who like to drop problems ... Discipline in time is an important thing, so it is assumed that a person can adapt in such these circumstances".

Theme 4. Personality Traits

It includes, according to data analysis, four personality traits.

Reserving

Some of the female teachers expressed that some students did not want to reveal their feelings to others, as the conversation was mentioned above, talking about some of their statements about that, it was reported that the female teachers explain the reason, because it may be due to shyness or other reasons, they emphasized that affects Mindfulness level for female students.

As for the female students, it also responded in the previous statements to protect their feelings, and to limit the disclosure only close friends or sister, S4 mentioned;

"I only express my feelings to someone I know 100%," also, there is some sense of alienation, as S3 mentioned; "I don't feel anyone understands me, so I'm always say do you understood me!... Only my sister understands me." S2 also justified the reason for non-disclosure and reservation about feelings and difficulties at these days by feeling independent. "I say to myself, there is no benefit to express my feelings ... I know that any advice comes to me, the solution became by me, so I prefer to solve my problem by myself, it's easier and faster and everything is going better", also she mentioned that she was reserving her feelings because of shyness. "I passed uncomfortable time but it changed so much. I was shy before".

Self-confidence

This has been mentioned in more than one place in the conversations of female teachers and students. T1 mentioned;

'I distributed them to two groups. I asked them to show me ideas, each group had their ideas, first group they present their ideas with an unnatural confidence even though they were very poor ideas, but the second group convinced me, there were two sweet ideas, but there is no self-confidence at all, they did not argue with me so I said, although you are better than the ideas of the previous group, you did not argue with me, but there is no self-confidence in some of them. The female students don't have confidence, they do not evaluate their ideas internally, there is confusion in it, they always feel a mistake, it is not correct, they need encouraging, but there are demands, there is an unnatural trust even if the idea is weak and you discuss with me, why make me change".

for T3, she emphasized the role of the female student's personality and her family in building confidence with the soul of the student, and the house may also contribute, as she mentioned, to her being defeated by the character;

"the character has a role how this girl was raised when she was a child ..." Also included in the conversion is an evidence of the characteristic of perseverance and longevity, as T2 mentioned: "I tried with some girls who have long breath, they were trying once, twice, three and five, and she doesn't say no, and some don't see her from the first time the second time they quit".

T2 also talked about sticking to the idea anyway and without accepting advice, or she is clinging her opinion and some others are trying, once upon a time a female student who had an idea that she would like to present an innovation project for people with special needs, which is an application in smart devices. she presented the idea to me and I told her that idea is popular and modern, search about it does exist and she searched and it was existed. So, I told her: What do you think you will develop it or change? Indeed, the student has changed and applied it. She presented in the Creativity Olympiad she didn't win, the research scholarship came and asked me about the idea of this student participating in the Olympiad who they have creativity in their research. I told them about the idea of this student. Her presentation of the research was very modest, she offered it to the Department of Giftedness and they loved it, and they raised the research scholarship and won the third place. Guidance and support. Some of the students get response to it, and some felt that they adhered to (his idea), and their pride were too much".

For the female students, S2 mentioned a change in self-confidence level and talent according to their temporal growth, and her statements have been cited. S4 mentioned the importance of having an external factor to gain self-confidence due to quality and correctness of what she is doing.

"I do not know whether it is correct or not. For example, when I handed the project to the teacher and she praised me here, I became sure that it was a salvation, everything became complete ..." The participants also linked between Mindfulness and social skills by the student's self-understanding, and S3 mentioned: "Whatever students was looking bad at herself, all her social contact was zero.

the results were related to self-confidence: Independence for talented students from the secondary stage, which was cited under the previous sub-topic (reservation).

Perfectionism

Perfectionism is mentioned in the statements of female students only, not teachers. So, S5 mentioned, that it re editing and corrects what it does of work and projects, and she has reached a solution for that: "I have set a rule in my life that if I like my work, I don't look back again, because sometimes we cannot fix it although we destroy it'.

Discussion And Conclusion

The purpose of this mixed consecutive explanatory study was to identify the level of Mindfulness and its relationship with the social skills of talented high school students. The results of the quantitative stage revealed a moderate Mindfulness for talented students in the secondary stage, and this is consistent with the study of Nagwani (2019), but it contradicts the results of the study of Al-Jubaylah (2020) which shows a high level. The quantitative results also showed a positive relationship between Mindfulness and social skills, and this is consistent with the study of Huang et al. (2019) which revealed that Mindfulness is related to life skills, including social skills. In addition, the results of the quantitative stage revealed a high social skills level for talented students at the secondary level, and this is consistent with the results of both (Aparecida & Prette, 2016) and (Citil & Özkubat, 2020), which proved that talented students possess high social skills.

It adopted the phenomenology approach with the aim of describing the phenomenon of Mindfulness for talented students at the secondary level by their level and relationship to social skills. The methodology of inductive, objective analysis was also followed to analyze the qualitative data. The analysis is that there are four major topics related to Mindfulness by its level and relationship to social skills. The topics are (1) the age stage, (2) the environment and the surrounding society, and the role of the family and school is branched out from it, (3) the meta-cognitive thinking, experiences and self-regulation are branching from it, (4) Personal traits, which are subdivided by conservatism and self-confidence (Self-confidence includes: independence, self-concept), anxiety and perfectionism.

The results of the analysis showed that these topics in their entirety affect Mindfulness in terms of its level and relationship to social skills. The qualitative results also revealed that the surrounding community environment (especially the family role) is the most influential on Mindfulness by its level and relationship to social skills, while the effect of other issues was almost equal and strong as well.

The qualitative results showed that Mindfulness is associated with a positive, direct correlation with development in the age stage, and this explains the quantitative results which were steady according to the progress in the classroom. The qualitative results also supported the effect of age groups on the association of mental associated with social skills. All this also agrees with what was mentioned in the theoretical literature, especially what was reported by Erikson & Joan (1997) in his theory of psychosocial development, and it was referred to in the theoretical framework. what T1 mentioned represents the development of growth towards the formation of identity, clarity of role, and self-understanding, and T1 assertion that Mindfulness level is higher in the second and third secondary school students than in the first secondary students. While what was mentioned by T3 emphasizes the role of the family in forming identity and defining the self-concept for dispersion and weakness of the concept.

S1' talk, which is from the first secondary grade, about the change that T1 described as total in the growth of the ability to observe what is happening around it, refers to the positive development of social interaction, and this may lead to success in the formation of identity as stipulated in the theory.

While S1'talk, first grade of secondary, is represented in the transition from the stage of competence, where the student was able at that stage to achieve confidence in ability and competence and this is clear when she said that in the past, she had trusted herself strongly, but her speech clearly shows the existence of a current struggle to form an identity while contrasting to the dispersion of role and weakness of self-concept, in her high self-criticism level.

This is also consistent with what I mentioned in the study of Al-Jabila (2020), as it resulted in the possibility of predicting the direction towards life through Mindfulness.

The qualitative results that were mentioned within the environment and the surrounding community revealed the great impact on raising Mindfulness level, but it is the most influential in other topics. The qualitative results also proved that the influence of the family is greater than the school, as it plays the most important role in raising Mindfulness level. These results showed a need to educate parents about talents and their requirements, and to enhance the practice of Mindfulness in their daughters, talented students at the secondary level. Many talented theories have emphasized the importance of considering the environment and surrounding community as an effective and influential factor in the formation and development of talent, for example (Almeida, Araujo, Sainz-Gómez & Prieto, 2016; Brown, Renzulli, Gubbins, Siegle, Zhang & Chen, 2005; Coleman, 2003; Heller, 2012; Reis & Renzulli, 2009).

Whereas educational literature emphasizes the importance of early detection and development of talent, the first custodian of the child (the family) can play a major role in the growth of talent and promote the practices associated with that contribute to the formation of the self and superiority, and according to capabilities and awareness of the family this role may be so positive-negative (Davis, Rimm & Siegle, 2017; Delisle, 2006; Robenson, Shore & Enersen, 2007; Walker, 2002).

The studies also show the great role that the school plays, and also emphasize the importance of effective communication by teachers and educators with families to raise parenting awareness and a good understanding of the environmental conditions directed by the gifted student and thus provide integrated comprehensive care, and services (Davis, Rimm & Siegle, 2017; Delisle, 2006; Robenson, Shore & Enersen, 2007; Walker, 2002).

The qualitative results also revealed a need to develop an awareness of the talent and its requirements (including the exercise of Mindfulness) for teachers of talented students at the secondary level, and previous studies confirmed this. Teachers think and virtually do in the classroom. Brown et al. (2005) emphasized that there are contradictions between the beliefs expressed by researchers in their research and what is actually being practiced in gifted education.

She emphasized that there are contradictions between the beliefs expressed by researchers in their research and what is actually being practiced in talented education.

The qualitative results show the impact of peers on mental alertness, which may be positive, as some female students indicated that they find in their classmates an outlet to reveal feelings and improve moods, and it may also be negative when comparing themself with peers, or an excessive desire to obtain Satisfaction and acceptance by them, or the difference in ideas and behaviors that may reach the level of quarrels and bullying. Also, these results showed a clear indication of the effect of the stigma of talent on talented students in the secondary stage, which leads to a feeling of psychological pressure and a desire to give up the distinction.

The educational literature supports these results, like Davis, Rimm & Siegle (2017) cautioned that peer pressure and the influence of the talent stigma leads to a deliberate lack of academic achievement by the talented student or miss distinction opportunities and thus a scientific loss at the personal and community level.

The qualitative results showed meta-cognitive thinking affects that Mindfulness and the qualitative results within meta-cognitive thinking confirmed that quantitative results showed the existence of a relationship between Mindfulness and social skills, in addition to the educational literature emphasizing the deep link between meta-cognitive thinking skills and social skills (Usher & Schunk, 2018). The qualitative results related to meta-cognitive thinking appeared indirectly through the teachers 'talk about the talented high school students' disclosure of their feelings, as they confirmed that some students could not be aware of the content of their feelings. This certainly requires the development of their skills. Meta-cognitive thinking, where studies emphasized the importance of teaching talented students to think meta-cognitive (Tortop, 2015; Stoeger & Stonag, 2012; Zimmerman & Martinez-Pons 1990).

While the role of metacognitive thinking in affecting Mindfulness was clearly evident in the statements of the talented high school female students. Where the researchers, while analyzing the data, formed the topic of metacognitive thinking by combining two categories: experience and self-regulation. S2 stated that she ignores bad news, but she is not aware exactly why she is doing this, and this may indicate a low level of meta-cognitive thinking. Whereas, S3 shows that she possesses a high level of meta-cognitive thinking, as she is more conscious of managing her thinking in relation to painful experiences. S4 has an advanced level of meta-cognitive thinking. She classifies her experience as painful and joyful and talks about how she got benefit from both and how to properly interact with them, and she also referred, indirectly and clearly to the importance of learning the right way to transfer experience.

She reviewed an example of the practice of meta-cognitive thinking to transfer an experience, which was formed because of learning to develop social skills for dealing with people in a specific situation and with specific people, by generalizing that experience or applying it in another social context, as it expressed her concern that this might lead

to poor results due to the different social context, so what may be an appropriate method of social interaction within a culture and with specific people, may not be appropriate in a society with another culture or people with different characteristics. Her talk here agrees with Grassinger, Porath, & Ziegler (2010), who talked about educating talented students and being careful while generalizing or transferring learning experience in another context.

The results reported that there is an effect of self-regulation on the level of Mindfulness, and this is consistent with what the educational literature has showed that the goal of practicing Mindfulness is to develop the capabilities of self-regulation, and this requires the individual awareness, attention, and reminder or what we call insight, which it relies on directing the person toward achieving his goals and improving his quality of life by improving supra-cognitive awareness and organizational processes (Ivtzan & Hart, 2016). In addition, the results indicated the students possess an advanced level of self-organization. This is consistent with many studies that showed that talented students perform better than others, with a statistically significant difference in self-organizing skills, for example; (Bouffard -Bouchard, Parent & Lavirée, 1993; Tortop, 2015; Zimmerman & Martinez-Pons, 1990), In addition, talented students are more efficient in using meta-cognitive thinking skills and transferring learning experiences to new learning situations (Risemberg & Zimmerman, 2010; Stoeger & Sontag, 2012). However, talented students may encounter difficulties and may need someone to help them to regard their mastery practice and self-regulatory strategies in particular (Sontag, Harder, Stoeger & Ziegler, 2012).

As for the fourth topic, personality traits, the results showed the major role that personality traits play in affecting Mindfulness, as well as the effect of personality traits raising the level of association between Mindfulness and social skills. Among those personality traits that affect Mindfulness, which the study revealed its presence in talented high school female students; Independence as the study of Solomon (2005). It is one of the important features, especially for persons who strive for excellence. It also shows that it helps the talented in making their decisions out of self-conviction and contributes to generating traits and desire to take risks proving viewpoint. On the other side, the qualitative results revealed the existence of intolerance of ideas among some talented high school students.

The qualitative results also showed there was a fluctuation in self-concept. This was clear in the feeling of inferiority, self-criticism, and negative comparison with others. By searching the data of the taking part students, five of them registered in the talent classes for this year, and one registered since last year, the researchers suggest that this may explain their fluctuating perception of talent, like Dai, Rinn, & Tan (2013), which examined the effect of talented students moving to gifted students to receive special care classes - the assumption that persons usually use peer groups when judging their academic competencies. This study states that contextual, individual, and developmental factors should be considered in an integrated manner during the provision of services for talent.

The qualitative results showed a clear tendency towards perfectionism and anxiety, and talented classes may support this tendency and increase the psychological stress of the students. However, the results also revealed a high degree of meta-cognitive thinking if it permits a reassessment of the situation, self-direction, and maximization of the positive gains of perfectionism and anxiety.

The educational literature has proven that, besides the features related to high cognitive abilities, talented people may be characterized by perfectionism and anxiety and may suffer from excessive use of these traits, and they may suffer from a low level of self-concept (Davis, Rimm & Siegle, 2017).

However, the previous two sources also mentioned that talented students have a better ability than others at emotional balance. Costa (2003/2011) notes that thinkers usually resort to using skills, knowledge, and self-regulation when they face a problem or challenge. As well as Costa asserts that true talent represents the right way which we have become accustomed to using thinking skills to solve problems. Rather, it results from working habits of mind. In conclusion, modern theories of talent have emphasized the importance of an integrated systemic view of talent that considers both individual and his cognitive and personal characteristics, the environment and the surrounding community in the interpretation and development of talent, and development of affected practices (which include Mindfulness and social skills). It showed this approach the ancient theories focused excessively on explaining talent by personality traits such as intelligence, talent, or superiority while minimizing or completely ignoring the social context entirely and external factors.

Therefore, you see that there is a need to identify the endogenous and exogenous sources to nurture and develop talent (Dai, 2021; Subotnik, Olszewski-Kubilius, & Worrell, 2020; Ziegler, Debatin, & Stoeger, 2019).

Through what mentioned above, the results confirm the importance of stimulating and developing practices related to raising the level of Mindfulness for talented female students, as well as the necessity of evaluating the personal factors and the various environments that would support raising or lowering their level of Mindfulness, and the necessity to consider and develop those supporting factors through education activities and services for the talented. And the detection of factors that have a negative impact, such as challenges that cause stress, anxiety, and others, and get rid of them or reduce their impact as possible.

Recommendations

Based on the results, the researchers recommend:

- Emphasis on male and female teachers by using strategies that contribute to stimulating and developing mindfulness practices in the activities of learning.
- Activating the role of counseling to enhancing the weaknesses of talented female students.
- The necessity to assess and enhance the environment surrounding talented female students to support mindfulness practices.
- The importance of focusing on developing personal, social, and meta-cognitive thinking skills to develop mindfulness practices.
- Emphasizing the role of family awareness and educators' awareness of talent in a way that supports increasing the level of mindfulness and social skills of talented students.

For Further Research

- Conducting systematic mixed research to investigate the affected factors raising the level of mindfulness.
- Conducting more research on the level of differences between talented and ordinary people, as well as the differences between the sexes in Mindfulness.
- Conducting experimental studies on the impact of programs and services for the talented on raising the level
 of Mindfulness.
- Researching the effect of local culture on the level of Mindfulness by comparing the results of studies from different settings.

References

- Almeida, L. S., Araújo, A. M., Sainz-Gómez, M., & Prieto, M.-D. (2016). Challenges in the identification of giftedness: Issues related to psychological assessment. *Anales De Psicología / Annals of Psychology, 32*(3), 621-627. https://doi.org/10.6018/analesps.32.3.259311
- Al-Sayed, Abdel-Halim, Mahmoud, Abdel-Moneim, and Faraj, Tarif (2004). *Contemporary Social Psychology* (2nd Edition). Itrak for printing and publishing, Cairo.
- Al-Ugaili, Jabbar and Al-Hawab, Naji (2019). Orientation towards life and its relationship to spiritual intelligence and mental alertness among distinguished high school students. *Journal of the College of Basic Education*, 104(25), 768-828.
- Aparecida, Z & Del Prette, P. (2016). Social skills of gifted and talented children. Estudos de Psicologia, 19(4), 288-295.
- Arévalo-Proaño, C., Dávila, Y., Álvarez-Cárdenas, F., Peñaherrera-Vélez, M. J., & Vélez-Calvo, X. (2019). El mindfulness para mejorar procesos ejecutivos y cognitivos en niños con altas capacidades. Revista INFAD de Psicología. *International Journal of Developmental and Educational Psychology*, 5(1), 429-440
- Aziz, A. R. A., Ab Razak, N. H., Sawai, R. P., Kasmani, M. F., Amat, M. I., & Shafie, A. A. H. (2021). Exploration of Challenges Among Gifted and Talented Children. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(4), 242-251.
- Bacal, E. (2015). The relationship between placement and social skills in gifted students. Unpublished PhD Dissertation, Arizona State University.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45
- Barbier, K., Donche, V., & Verschueren, K. (2019). Academic (under) achievement of intellectually gifted students in the transition between primary and secondary education: An individual learner perspective. *Frontiers in Psychology, 10,* 2533.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2). 77-101
- Brody, L. E. & Muratori. M. C. (2020). *Counseling Gifted and Talented Students*. In. J. A. Plucker, & C. M.Callahan. Critical Issues and Practices in Gifted Education: A Survey of Current Research on Giftedness and Talent Development. (3rd ed.). (pp. 123-136) NAGC
- Brown, S. W., Renzulli, J. S., Gubbins, E. J., Siegle, D., & al, e. (2005). Assumptions underlying the identification of gifted and talented students. *The Gifted Child Quarterly*, 49(1), 68-79. Retrieved from https://search-proquest-com.sdl.idm.oclc.org/docview/212096180?accountid=142908
- Brown, W., Ryan, M., & Creswell, D. (2007). Mindfulness theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 8(4), 211-237
- Bouffard -Bouchard, T., Parent, S. & Lavirée, S. (1993). Self-Regulation on a Concept-Formation Task among Average and Gifted Students. *Journal of Experimental Child Psychology*, 56(1), 115-134
- Chien-Chung Huang, Yafan Chen, Huiying Jin, Marci Stringham, Chuwei Liu, & Cailee Oliver. (2020). *Mindfulness, Life Skills,* Resilience, and Emotional and Behavioral Problems for Gifted Low-Income Adolescents in China. Frontiers in Psychology, 11. https://doiorg.sdl.idm.oclc.org/10.3389/fpsyg.2020.00594.

- Citil, M., & Özkubat, U. (2020). The comparison of the social skills, problem behaviors and academic competence of gifted students and their non-gifted peers. *International Journal of Progressive Education*, 16(6), 296-312.
- Coleman, M. R. (2003). The identification of students who are gifted. ERIC Digest. (ERIC Document Reproduction No. ED480431).
- Combs, M. L., & Slaby, D. A. (1977). *Social-skills training with children*. In Advances in clinical child psychology (pp. 161-201). Springer, Boston, MA.
- Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative (pp. 146-166). Upper Saddle River, NJ: Prentice Hall.
- Dai, D. Y. (2017). Envisioning a new foundation for gifted education: Evolving Complexity Theory (ECT) of talent development. *Gifted Child Quarterly*, 61(3), 172-182.
- Dai, D. Y. (2019). New directions in talent development research: A developmental systems perspective. New directions for child and adolescent development, 2019(168), 177-197.
- Dai, D. Y. (2020). Rethinking human potential from a talent development perspective. *Journal for the Education of the Gifted*, 43(1), 19-37.
- Dai, D. Y. (2021). Evolving complexity Theory (ECT) of Talent Development: A New Vision for Gifted and Talented Education. In R. J. Sternberg and D. Ambrose. Conceptions of Giftedness and Talent.
- Dai, D. Y., Rinn, A. N., & Tan, X. (2013). When the big fish turns small: Effects of participating in gifted summer programs on academic self-concepts. *Journal of Advanced Academics*, 24(1), 4-26.
- Davis, D. M., & Hayes, J. A. (2011). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy*, 48(2), 198–208.
- Davis, A., Rimm, B. & Siegle, D. (2017). Education of the gifted and talented. (7th ed.). Boston: Allyn & Bacon.
- Doss, K. K., & Bloom, L. (2018). Mindfulness in the middle school classroom: Strategies to target social and emotional well-being of gifted students. *Gifted Education International*, 34(2), 181-192.
- Delisle, J. (2006). Parenting Gifted Kids. Tips for Raising Happy and Successful Children. Prufrock.
- Eren, F., Çete, A. Ö., Avcil, S., & Baykara, B. (2018). Emotional and behavioral characteristics of gifted children and their families. *Archives of Neuropsychiatry*, 55(2), 105.
- Erikson. Erik H. and Joan M. (1997). The life cycle completed: Extended version. New York: W. W. Norton & Company. Kindle Edition. Flick, U. (2014). An introduction to qualitative research. Lodon: Sage.
- Grassinger, R., Porath, M., & Ziegler, A. (2010). Mentoring the gifted: A conceptual analysis. High Ability Studies, 21(1), 27-46.
- Hébert, T. P., & Kane, M. (2020). Enhanced Well-Being Through Mindfulness: Supporting the Gifted Adolescent Journey. Gifted Child Today, 43(2).
- Heller, K. A. (2012). *Identification: An Integral Part of Gifted Education*. In: A. Ziegler, C. Fischer, H. Stoeger & Reutlinger (Eds). Gifted Education as a Lifelong Challenge (pp.81-95). Lit Verlag GmbH & Co. KG Wien.
- Heshmati, R., & Maanifar, S. (2018). Metacognition, mindfulness, and spiritual well-being in gifted high school students. *Health, Spirituality and Medical Ethics*, 5(3), 22-28.
- Huang, C. C., Chen, Y., Jin, H., Stringham, M., Liu, C., & Oliver, C. (2020). Mindfulness, life skills, resilience, and emotional and behavioral problems for gifted low-income adolescents in China. Frontiers in psychology, 11, 594.
- Huang, C., Chen, Y., Cheung, S., Greene, L., Lu, S. (2019). Resilience, emotional problems, and behavioral problems of adolescents in China: Roles of mindfulness and life skills. *Health and Social Care in the Community, 27*, 1158–1166.
- Ivtzan, I. Hart, R. (2016). *Mindfulness Scholarship and Interventions*: A Review. In A. L. Baltzell. Mindfulness and Performance. Current Perspectives in Social and Behavioral Science. Cambridge.
- Jack, E. P., & Raturi, A. S. (2006). Lessons learned from methodological triangulation in management research. *Management Research News*, 29(6), 345-357.
- Johnson, R. B. & Chirstensen, L. (2014). Educational Research, Quantitative, Qualitative, and Mixed Approaches. (5th ed.). Sage.
- Jubaila, Jawhara. (2020). Orientation towards life and its relationship to ego flexibility and mental alertness among university students. *Educational Journal*, 1(78), 1346-1381.
- Kane, M. (2018). Creating a culture of calm: Mindfulness unfolding in the classroom. *Gifted Education International*, 34(2), 162-172. Karateke, B. (2017). Social skills training in potentially gifted children. *Journal for the Education of Gifted Young Scientists*, 5(3), 90-104.
- Malboeuf-Hurtubise, C., Léger-Goodes, T., Mageau, G. A., Joussemet, M., Herba, C., Chadi, N., Lefrançois, D., Camden, C., Bussières, È.-L., Taylor, G., Éthier, M.-A., & Gagnon, M. (2021). Philosophy for children and mindfulness during COVID-19: Results from a randomized cluster trial and impact on mental health in elementary school students. Progress in Neuropsychopharmacology & Biological Psychiatry, 107. https://doi-org.sdl.idm.oclc.org/10.1016/j.pnpbp.2021.11026
- Moratta-Garcia, C. (2011). Teachers use of a differentiated curriculum for gifted students. Unpublished Dissertation. University of Southern California.
- Nagwani, Najla. (2019). Mental alertness among students of post-basic education in the light of some variables in the Governorate of Muscat. *Journal of Educational and Psychological Studies*, 13(2), 220-234
- Papadopoulos, D. (2020). Psychological Framework for Gifted Children's Cognitive and Socio-Emotional Development: A Review of the Research Literature and Implications. *Journal for the Education of Gifted Young Scientists*, 8(1), 305-323.
- Reis, S. M. & Renzulli, J. S. (2009). *The Schoolwide Enrichment Modal: A Focus on Students Strengths & Interests*. In J. S. Renzulli, E. J. Gubbins, K. S. McMillen, R. D. Eckert & C. A. Little (Ed.), Systems & Models for Developing Programs for The Gifted & Talented (2nd ed.). Creative Learning Press INC.
- Risemberg, R & Zimmerman, B. J. (2010). Becoming a Self-Regulated Writer: A Social Cognitive Perspective. *Contemporary Educational Psychology*, 22(1), 73-101.
- Robinson, A. Shore, B. Enersen, D. (2007). Best Practices in Gifted Education. An Evidence-Baced Guide. NAGC. Prufrock.
- Silverman, L. K. (2002). *Asynhronous Development*. In M. Nrihart, S. M. Reis, N. M. Robinsom & S. M. Moon. The Social and Emotional Development of Gifted Children: What Do We Know? Prufrock press INC. pp. 31-40.

- Sisk, D. A. (2018). An Exploration of Mindfulness Practices and Leadership. Creative Education, 9, 1302.1311-
- Sontag, C., Harder, B., Stoeger, H. & Ziegler, A. (2012). The smarter the more self-regulated? A study on the relationship between intelligence and self-regulated learning. In H. Stoeger, A. Aljughaiman & B. Harder (Eds.). Talent development and excellence. (pp. 191-210). Berlin: LIT.
- Stoeger, H. & Sontag, C. (2012). The Relationship Between Intelligence and the Preference for Self-Regulated Learning: A Longitudinal Study with Fourth-Graders. *Talent Development & Excellence Congress*. (pp. 315-337) Berlin: LIT.
- Szyanski, A. (2020). Social and Eotional Issue in Gifted Education. In. J. A. Plucker, & C. M.Callahan. Critical Issues and Practices in Gifted Education: A Survey of Current Research on Giftedness and Talent Development. (3rd ed.). (pp. 417-425) NAGC.
- Tortop, H. (2015). A Comparison of Gifted and Non-gifted Students' Self-regulation Skills for Science Learning. *Journal for the Education of Gifted Young Scientists*, 3(1), 42-57. Retrieved from https://dergipark.org.tr/en/pub/jegys/issue/37559/433820
- Usher, E. &, Schunk D. (2018). Social Cognitive Theoretical Perspective of Self-Regulation. In D. H. Schunk & J.A. Greene (Eds.). Handbook of Self-Regulation of Learning and Performance. (2nd ed.). (pp. 19-35). Routedge.
- Walker, S. Y. (2002). The Survival Guide for Parents of Gifted Kids. How to Understand, Live with, and Stick up for Your Gifted Children. Free Spirit.
- Zahra, Sayyeda Taskeen & Riaz, Saima (2017). Mediating role of mindfulness in stress-resilience relationship among university students. *Pakistan Journal of Psychology*, 48(2), 21-32.
- Ziegler, A. (2005). The actiotope model of giftedness. Conceptions of giftedness, 2, 411-436.
- Ziegler, A., Debatin, T., & Stoeger, H. (2019). Learning resources and talent development from a systemic point of view. *Annals of the New York Academy of Sciences*, 1445(1), 39–51. https://doi-org.sdl.idm.oclc.org/10.1111/nyas.14018
- Zimmerman, B. J. & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, 82, 51-59.

Appendix 1.

Questions (Focus Group) for Mental Alertness

Parameter Model

First: How would you describe the level of mental alertness among gifted female students in the secondary stage?

- 1. To what extent can talented female students at the secondary level:
- Paying attention or noticing their internal experiences, such as noticing their feelings and knowing their emotions?
- To what extent can they pay attention to external experiences such as sounds, light, sensations, and various environmental influences?
- 2. How can the experiences and inner feelings and the ability to express them in words among the gifted female students in the secondary stage?
- 3. How can the conscious behavior of talented female students in secondary school be described while they are engaged in work with other distractions?
- 4. To what extent do talented female students at the secondary level tend to make judgments or evaluate their inner thoughts and feelings regarding whether they are good or bad?
- 5. To what extent can the thoughts and feelings lose the talented female students in the secondary stage in the present moment?

Second: How would you describe the relationship of mental alertness with the social skills of gifted female students in the secondary stage?

To clarify: How might mindfulness (all discussed) have anything to do with the social skills of gifted female high school students?

Student Model

First, how would you describe your level of mental alertness?

- 1. How far can you
- Paying attention or noticing internal experiences, such as noticing your feelings and knowing your emotions?
- To what extent can you pay attention to external experiences such as sounds, light, sensations, and different environmental influences?
- 2. How would you describe and express your inner feelings or experiences in words?
- 3. How conscious can you act in the work you are involved in, even with other distractions?
- 4. To what extent do you tend to judge or evaluate your inner thoughts and feelings for good or bad?
- 5. To what extent can thoughts and feelings make you lose focus in the present moment?

Second, how would you describe the relationship of your level of mental alertness to your social skills?

To clarify: How might mental alertness (all discussed) have anything to do with your social skills?



Journal of Gifted Education and Creativity, 8(2), 57-71, August 2021 e-ISSN: 2149- 1410 jgedc.org



Review Article

Kızılçulu Science and Art Center' facilities, novelties, and internationalizations for gifted students with BUCA IMSEF competition: a case study

Cansu İlke Kuru, Belit Karaca, Meltem Gönülol Çelikoğlu, Ümit Karademir

Buca Municipality Kızılçullu Science and Art Center, Buca, İzmir, Turkey

Article Info

Received: 06 January 2021 Accepted: 31 July 2021 Available online: 15 August 2021

Keywords:
Gifted Education
Gifted Students
Science and Art Center

2149-1410/ © 2021 The Authors. Published by Young Wise Pub. Ltd. This is an open access article under the CC BY-NC-ND license



Abstract

Special education programs are applied for gifted students all over the world. In order for these children to be useful people to the world and their countries, the education they receive should keep up with the changing educational technologies in the world. In Turkey, Science and Art Centers (SACs) are special education centers for gifted students. But SACs are not sufficient both in number and also experiencing some problems in training at these centers. Within the scope of this study, the role of SACs for gifted students education was investigated. Considering the problems encountered in science and art centers in Turkey, we suggest a novel education system for gifted students from kindergarten to university who need special education. With the implementation of this system, the problems encountered in the training are largely resolved and gifted students benefit more with active learning from these centers. In the talent workshops where application courses are held, it is planned for students who are talented in the fields of natural and science, mathematics, astronomy, music, painting, photography, robotics, coding, ceramics and philosophy. Kızılçullu Science and Art Center (KSAC) organize the national and international music and science fair Buca IMSEF (International Music Science Energy Engineering Fair) with the approval of the Ministry of National Education. Students exhibit their projects and talents in the field of science and music. In this new system applied in KSAC, gifted students are discovered in the society. In addition, they develop their special abilities and use their capacities. They carry out interdisciplinary research and activities in the fields of science and arts and get opportunity to show themselves on national and international platforms.

To cite this article:

Kuru, C.İ., Karaca, B., Gönülol Çelikoğlu, M., & Karademir, U. (2021). Kızılçulu Science and Art Center' Facilities, Novelties, and Internationalizations for Gifted Students with BUCA IMSEF competition: a case study. *Journal of Gifted Education and Creativity*, 8(2), 57-71.

Introduction

The development of a country and its reaching the level of modern civilization is closely related to the efficient use of human resources, the most valuable asset. For this reason, it is one of the most important responsibilities of today's contemporary education system to discover and educate today's gifted students, the most important human resource of the future, in the development of a society (Muyia et al. 2018)

Today, in the definition of giftedness, Renzulli's definition is widely accepted. According to Renzulli's "three rings" theory giftedness arises from the interaction of talent, creativity, and motivation (Renzuli, 1986). Gifted child was defined at the

1978 American Congress; "Has a proven potential ability at preschool, primary or secondary level; Displaying high performance or leadership ability in areas such as intellectual, creativity, specific academy; it is a child who shows superior performance in visual fields and whose services or activities cannot be met by the school generally" (as cited in Babaeva and Voiskounsky, 2002).

Gifted students talented individual; unlike its peers, it forms a privileged group. Because these students learn faster than their peers; they are individuals who have creativity, art, leadership capacity, special academic skills, understand abstract ideas, love to act independently in their areas of interest and perform at a high level (Kitsantas et al. 2017;

Batdal Karaduman, 2009). The main characteristics that distinguish these students from other students can be listed as follows: less need for sleep, rapid language development, broad vocabulary, fluent speech, complete early development (early walking, early speaking), too much interest in books, dictionaries, atlases, calendars and puzzles at a very early age, good observation ability, long attention span in interests, strong memory, preferring adults rather than peers in communication, improved humor ability, fast and easy learning, generating original ideas, quickly getting bored with uniform work. These different characteristic of gifted students form a disadvantaged group within their peers. A differentiated education program is required for disadvantaged or gifted students to be successful, to use their full potential, to contribute to their country and the world (Davasligil and Zeana 2004; Genc, 2016, MEB, 2017; Ersoy & Avci, 2004). Enc (2005) states that these students may experience adaptation and development problems within a training program designed for average learning power. In this case, failure will be inevitable since the student will not be able to establish a connection between the active thinking of the student and the education given at the school (Streitz, 1922). Passow (1981) also states that these individuals need differentiated educational programs and services beyond normal school programs in order to contribute to themselves and the society. In our country, Turkey, an examination-oriented education is provided and no special education is offered for gifted students. State of the art trainings are given to gifted people, but the support trainings provided are insufficient. These support trainings are provided by Science and Art Centers (BİLSEM) (Kılıç, 2015). To the extent that the problem of evaluating gifted individuals concerns the National Education system, it also concerns citizens of all countries. Because gifted individuals are rare public values in the country.

In order to develop gifted students, to be more beneficial to society in the future and to reveal their existing capacity, their characteristics must first be well known. Recognition of gifted students is very important for those who are interested in the education of the child, for them to achieve success by achieving a healthy development and to be able to reach higher qualifications. Consciously selected stimulants, equipment, consciously organized educational environments and activities to be offered to the child support gifted students in a healthy way and ensure that they use their development capacity at the highest level (Kadioglu & Afat, 2018).

However, gifted and talented students often fail to demonstrate their gifted abilities, as a result of the lack of appropriate educational policies and sometimes not being directed correctly. The number of gifted and specially talented people, which humanity cannot benefit from, is not small. Sometimes, while encountering the extraordinary achievements of an individual with a normal intelligence level, we can also encounter situations where they are not self-sufficient to put forward a great invention, not just individuals with superior skills (Bildiren, 2018). This shows that a special education program is needed for gifted people. Therefore, it is necessary to provide the environment and opportunities that are considered to be the most valuable resource of the society and whose numbers are limited, in order to prevent the loss of gifted individuals and to raise them in the most healthy and productive way. These students should be trained with appropriate programs and specially trained staff (Heuser et al. 2017).

The Role of Science and Art Centers in the Education of gifted students

Many countries started work on this issue early and developed various projects and models for the training of gifted. Israel, Russia, USA, China have developed high intelligence and inventor tests to identify gifted students. With these tests, they systematically screened their communities and established private schools and universities for the education of gifted. Due to the different approaches of countries about education systems and giftedness, opportunities for international student identification and education of gifted individuals vary. There are countries such as Sweden, which offer differentiated and individualized education to all their students, including gifted students, in ordinary formal education, on the other hand, there are also countries that open schools specific to selected students such as China and Russia (Genç, 2016).

Gifted Education in Turkey

In Turkey, in the historical process, it is seen that gifted children have received special training from childhood in order to be employed at important levels of the state administration. For example, the education of gifted children in the Nizamiye Madrasahs during the Anatolian Seljuk Period was continued in the Ottoman Empire with the Enderun School. Gifted children trained in these institutions worked at levels of the state (Akkutay, 1984). Considering the early periods of the history of the Republic, it is seen that the education of gifted children was given importance. In 1929, the Law No. 1416 on "Law of Students to be Sent to Foreign Countries" was enacted and it was aimed to raise gifted children. Within the framework of this law, which is still in effect today, the Ministry of Education has provided scholarships to gifted students to receive education at prestigious universities abroad; encouraged their development

in the fields of science, culture and arts (Levent, 2011). In 1948, a law numbered 5245, known as the "Law of Wonder Children" and also referred to as "İdil Biret-Suna Blood Law", was passed in order to continue the studies in the field of art and to raise talented artists; In this way, gifted children were provided with education abroad. In the early 1960s, in line with the decisions of the National Education Council, it has decided to open science high schools in order to train gifted students in the fields of science and mathematics. The opening of science high schools in Turkey has been made in the field of gifted education is seen as one of the most important steps. In the 1990s, Science and Art Centers (BİLSEM) was established by the Ministry of National Education in order for gifted students in pre-school, primary and secondary education institutions to receive education in their spare time to the extent of their interests and abilities; In these centers, it is aimed for children to conduct research and inventions based on critical thinking (For detailed information, see. Pak and Özden, 2018). The purpose of BİLSEMs is clearly regulated in the 1st Article of the "Ministry of National Education Science and Art Centers Directive" published in February 2007 and numbered 2593. According to this article, the purpose of BİLSEMs is "To ensure that gifted children / students in pre-school, primary and secondary school age are aware of their individual abilities and use them at the highest level by developing their capacities, students are selected, enrollment, education, training, selection of administrators and teachers, and the establishment and functioning of science and art centers to regulate the procedures and principles related to this issue. " (MEB, 2007).

Today, it is seen that the education of gifted students is supported by Science and Art Centers where reinforcement courses are given to gifted students affiliated with the Ministry of National Education. However, their number is very insufficient. These centers serve approximately 8-10 thousand students in Turkey in general. However, due to the 500 thousand gifted students in Turkey, it is also estimated to be two thousand due to genius level students. These students with a high level of understanding and infrastructure that can open the way to the country in the future. Programs applied to talented students in science and art centers are handled within the scope of Science and Art Centers Directive. In addition, the Special Education Services Regulation also includes some issues regarding the functioning of the institution (MEB, 2012). There is no program like formal education in these centers. The education of gifted and talented students needs to be improved and some aspects of their talents should be developed through activities that will highlight their interests and abilities with a curriculum that will be prepared in accordance with the education of these students (Levent and Bakioğlu, 2013; Dağlıoğlu et al. 2010; Sak et al. 2015).

Science and Art Centers Problems and Suggestion

While the positive aspects of being talented in society are generally taken into consideration, the difficulties faced by talented people can be ignored by the society. Undesirable behaviors can occur when their success is not supported, or their students cannot be understood, or when these students are not understood. Learning skills and motivation are high in areas where special talented students are interested. They can work independently in these areas and be productive. However, when they are forced to comply with the speed of their peers in school life, cannot meet their learning needs and have to progress slowly, their motivation gradually decreases. While working on their own in their areas of interest, they may experience academic failure with low motivation in school life, while their motivation is high. Some of the undesirable behaviors of specially talented students in school can be listed as follows: They can get bored in the classroom environment because they learn quickly according to their peers, and can complain by their teachers on the grounds that they disrupt class order (Citil, 2018). They can achieve success especially in the primary school period without much effort, but since this will prevent them from gaining the habit of studying, they may have difficulty in success in the following years. Failure to understand the words used by his peers due to his rich vocabulary may cause them to be alone. Hypersensitivity can cause them to develop various anxiety and fears, and they can easily get hurt. Students may lose their self-confidence and wear themselves out due to the high expectations that arise with feelings of perfectionism. Due to the diagnosis of "special talent", high expectations of the family and teachers and not giving the child a chance to make mistakes may cause psychological problems (low self-confidence, depression, introversion, etc.). Because they are always in question, they may have conflicts with their teachers in the classroom and the family national and can be considered as rebellious (Öztabak, 2018).

In the study of Kazu and Şenol (2012), in which the findings about the problems teachers encounter in the education of gifted students were examined, it was observed that most of the teachers encountered problems related to the physical environment conditions of the Science and Art Centers in the education of gifted students. Similarly, in the study of Sezginsoy (2007), it was concluded that the physical equipment status of the teachers in the centers was not sufficient. In these studies, it was concluded that the teachers did not find the building equipment conditions

of the centers, materials, game tools, playgrounds, computers, library resources sufficient. In the results of Tantay (2010) 's research, teachers' opinions are that there are many physical deficiencies in BILSEM.

The results of Sezginsoy (2007), show that the problems encountered in the education-training situation are that teachers do not receive sufficient in-service training, therefore they do not know how to apply education for gifted students in centers. The problem stated in parallel with this problem is the lack of a regular training program for teachers to follow for gifted students. In the study of Özkan (2009), the program implemented in BILSEMs needs to be prepared by the Ministry of Education and enriched by institutions such as universities and Scientific and Technical Research Council of Turkey (TUBITAK), that the execution of BILSEMs based on instructions instead of regulations creates problems, will contribute to the development of teachers and administrators; they concluded that they do not find the in-service training seminars related to the training of gifted people sufficient.

As can be seen, the results of the studies are similar to each other. Besides of these studies, schools for the education of students in the gifted students in Turkey were examined. However, within the scope considered in this study, it was observed that a versatile and balanced education system was not present in any of the schools examined. The applied programs are available in separate branches such as music, sports, fine arts, science and generally at the high school level.

Need for a new system of Science and Art Center for gifted students' education

In light of this information, in this study, a new education system that has been proposed for gifted students from kindergarten to university in Kızılçullu Science and Art Center, Buca, İzmir, Turkey to receive special education in science and arts, to learn by living through in nature camps and laboratory studies, and to receive education with competencies created according to their interests.

Gifted Students Education Model of Kızılçullu Science and Art Center

BILSEM (Science and Art Center): Preschool, primary and secondary education institutions continuing gifted or talented students in formal education institutions to discover their talents and themselves in line with their interests besides their education. It is a private educational institution established to ensure the highest level of development. Within the scope of the study, it is aimed to explain to Kızılçullu Science and Art Center (KSAC), where gifted students living and studying in Buca district of Izmir, from kindergarten to university, can receive special education free of charge. In Kızılçullu Science and Art Center is aimed to ensure that gifted students are discovered and noticed in the society, guide gifted students in line with their interests and abilities, enable them to develop their special talents and use their capacities, enable and guide them to conduct



interdisciplinary research and activities; ensure that they are successful individuals in the future by being supported throughout their education life, support the use of the work to be put forward for gifted people and our society. It is also aimed to enable them to show themselves in national and international platforms.

KSAC Mentor Selection

At the Kızılçullu Science and Art Center, where a different education model is applied, students are educated by a team with a master and doctorate degree specializing in their fields, students spend time in workshops according to their abilities outside the normal curriculum, and their skills are developed and different aspects are brought forward.

KSAC Gifted Student Selection

Selection of students to Kızılçullu Science and Art Center, where students can receive education service without paying any fee, in order to contribute to the education they receive at school. Students first go through an interview and a questionnaire. Thus, special interests are determined. Special abilities, skills and capacities of students are taken into account in shaping the programs to be implemented at the center. In addition to collective lessons that include current developments in science and art and adopt teamwork spirit, scientific project studies and individual studies in the field of art are conducted in line with their interests. Besides these, talented students in the fields of natural sciences, mathematics, astronomy, music, painting, photography, robotics, coding, ceramics, and philosophy are planned to work in talent workshops where practice courses are held.

Facilities of KSAC Curriculum and Teaching Process

Special trainings are given to students to develop inquisitive and solution-oriented thought structures, to create a sense of curiosity and awareness, to dream, to discover and develop themselves in line with their skills and interests in

science and art. Educational arrangements are made to meet the need for some learning features such as learning and processing information much faster than the peers of gifted students.

For this purpose, museums, libraries, observatories, R&D centers, laboratories, industrial establishments, universities, botanical gardens, concerts, art workshops, festivals and exhibition visits are organized for students to learn by seeing and living. In addition to these activities, science, art and nature camps are organized periodically in order to help students gain awareness of nature and the environment and to carry out applied works on site. In these camps, it is planned that the students actively participate in scientific lessons and workshops in nature, as well as social and cultural sharing with their peers through social activities.



Figure 1.
Studies in Kızılçullu Science and Art Center

Entrepreneurship, environmental problems, social problems, global problems etc., where schools from different countries participate and are asked to fulfill these tasks by assigning tasks to students in a certain period of time. By participating in international online competitions, students are provided with the opportunity to work with their peers internationally, improve their English, demonstrate their talents, gain the ability to find a solution to a particular problem, improve their vision and socialize.

In line with their abilities, gifted students studying at the Kızılçullu Science and Art Center have the opportunity to present their projects carried out under the supervision of academicians who are experts in their fields, in different national and international organizations.

Gifted students studying at the Kızılçullu Science and Art Center are have the opportunity to participate in international organizations by benefiting from these opportunities, to present in international organizations, to develop self-confidence, and to share social and cultural with their peers.



Figure 2.

Studies in Kızılçullu Science and Art Center

Evaluation-Achievement of Gifted Students educated in Kızılçullu Science and Art Center

The benefits expected to be gained as a result of the educational activities to be carried out at the Kızılçullu Science and Art Center, which is planned to be established for the education of gifted students, are detailed below:

- By conducting field studies, trips, science, art and nature camps with gifted students, students actively live onsite, learn by seeing, gain awareness of nature and the environment, and share social and cultural with their peers through social activities,
- To explore the areas of interest and talent by conducting scientific project studies, individual studies and workshops in the field of art, in line with their collective courses and interests, in order to contribute to the education they receive at school, and to adopt a team working spirit, following current developments in science and art,



Figure 3.

Music Studies in Kızılçullu Science and Art Center

- Preventing students from getting habit of getting bored and studying habits such as boring and disrupting the
 classroom order, as they learn quickly with the lessons they take and applied workshops in line with their
 interests,
- By participating in international competitions attended by peers from different countries, working with their peers in the international arena, developing their foreign language skills, exhibiting their talents, acquiring the ability to find a solution to a particular problem, and developing and socializing their vision,
- To overcome the lack of self-confidence, which comes with the perfectionism feelings that can create a disadvantage for gifted students with the projects to be carried out under the consultancy of academicians who are experts in their fields at universities, to be able to express themselves, to be world people, by participating in different organizations national and international.



Figure 4.
Science Studies in Kızılçullu Science and Art Center

• To develop organizational abilities by taking various duties in national and international events to be held, to work in a planned manner, to produce solutions, to take responsibility,

Directing young people to their interests and abilities with the activities to be carried out, one of the most important problems seen in today's youth, removing young people from bad habits, directing their interests in the right direction, preventing them from developing various anxiety and fears due to their hypersensitivity, depression, inward closure due to high expectations. They gain the benefits of preventing psychological problems such as low self-confidence, etc.



Figure 5.
Robotic-Coding Studies in Kızılçullu Science and Art Center

Within the scope of Kızılçullu Science and Art Center, specially talented students are be trained as individuals who are responsible, equipped in every sense, recognizable in the society, who can plan their time and future, and respect their environment and nature.



Figure 6.

Nature Camp Studies in Kızılçullu Science and Art Center

Sustainability Plan of Kızılçullu Science And Art Center

- Kızılçullu Science and Art Center is provide training within the framework of the curriculum created with an academic team with a doctorate and master's degree. The curriculum and activities are updated in line with the students' developments, interests and wishes, and their continuity will be provided.
- Training satisfaction levels, requests and complaints given to the students through questionnaires and meetings will be determined and updates will be made on the education model.

The BUCA IMSEF contest organized by the center will be repeated every year, and students of the Kızılçullu Science and Art Center will take part in this organization.



Figure 7.
Social Responsibility Studies in Kızılçullu Science and Art Center

Science, arts and nature camps that will be held are also activities that are continuous and students will gain different experiences.

Representative of the last 53 participation as Turkey representative of students each year to different organizations and from these 53 organizations from these overseas, held last sustainability of the international connections the center with students who attended the Buca IMSEF fair will be provided.

Gifted students from kindergarten to university will be trained at Kızılçullu Science and Art Center. Lesson plans will be arranged according to students' interests and educational status. Below is a sample annual plan covering one-year activities and sample monthly and weekly plans for primary, secondary and high school students.

New Approach for Gifted Education: An International Organization That Brings Together Gifted Students From Around The World-BUCA IMSEF

Kızılçullu Science and Art Center team organizes the national and international music and science fair Buca IMSEF (International Music Science Energy Engineering Fair) in Izmir-Buca district with the approval of the Ministry of National Education. It is a new approach for internationalization of gifted student education. The organization includes categories of physics, chemistry, biology, mathematics-computers, energy-engineering and music-piano. Domestic and international students will exhibit their projects and talents in the field of science and music, and will be evaluated and awarded by academics who are experts in their fields. Students of the Kızılçullu Science and Art Center will also take on tasks such as guiding international teams, helping the organization team, and displaying their talents on stage at ceremonies. These tasks will contribute to the students such as socializing with their peers national

and international, gaining team spirit, taking part in the organization and solving problems, self-development by being aware of scientific and artistic activities carried out worldwide.



Figure 8.Categories of BUCA IMSEF

According to the data obtained from Buca District National Education, there are 182 official and private schools from kindergarten to university in Buca district of İzmir. The distribution of these schools is given in Table 1 and Table 2 below.

Table 1.The Distribution of the Schools in Buca District of Izmir

| School Type | Public | Private | Total |
|--|--------|---------|-------|
| Kindergarten | 4 | 55 | 59 |
| Primary School | 32 | 9 | 41 |
| Secondary School | 27 | 10 | 37 |
| Imam Hatip Secondary School | 5 | - | 5 |
| Anatolian High School | 9 | 9 | 18 |
| Science High School | 1 | 5 | 6 |
| Social Science High School | 1 | - | 1 |
| Fine Arts High School | 1 | - | 1 |
| Sports high school | 1 | - | 1 |
| Vocational and Technical Anatolian High School | 6 | - | 6 |
| Anatolian Imam Hatip Highschool | 3 | - | 3 |
| Special Education Business Application Center | 1 | - | 1 |
| Private Vocational Training Center | 1 | - | 1 |
| Public Education Center | 1 | - | 1 |
| Guidance and Research Center | 1 | - | 1 |
| Total | 94 | 88 | 182 |

Table 2.Number of Students in Public and Private Schools in Buca District of Izmir

| School Type | Number of Schools / Institutions | Number of Teachers | Number of Students | Number of Classrooms | Number of Students per Classroom |
|-------------|--|-----------------------|-----------------------|----------------------|-------------------------------------|
| Public | 94 | 4009 | 72956 | 1728 | 42 |
| Private | 88 | 991 | 6792 | 514 | 13 |
| Total | 182 | 5000 | 79748 | 2242 | 36 |

79748 students receive education in 182 schools in Buca district. Of these students, 487 students were identified as gifted by the Counseling and Research Center of Buca District National Education Directorate.

Working Study Plan of Kızılçullu Science and Art Center

Gifted students from kindergarten to university will be trained in Kızılçullu Science and Art Center. Gifted students guided by the guidance units of the schools and individual applications will be accepted at the center through written or oral interviews. The number of gifted students who will receive education at the center will be determined according

to the physical conditions of the building. Lesson plans will be arranged according to students' interests and educational background. Below is a sample one-year plan covering one-year activities and sample monthly and weekly plans for primary, secondary and high school students.

Table 3.Kizilçullu Science And Art Center Sample Annual Plan

| Kızılçullu Science And Art Center Sample Annual Plan | | | | |
|--|--|--|--|--|
| Date Activity | | | | |
| January-June | Science and Art Classes, Talent Workshops | | | |
| February | Kızılçullu Science and Art Center Students Piano Concert | | | |
| May-December | Scientific Project Studies | | | |
| February-April | Regional and Final Project Competition Participation | | | |
| March- October | Participation in National and International Project Competitions | | | |
| April | Science, Nature and Art Camp with secondary school students | | | |
| A suil Desember | Social Responsibility Projects Related to Environmental Awareness within | | | |
| April-December | the Scope of Buca District | | | |
| May | Kızılçullu Science and Art Center Choir Concert | | | |
| May | Online Entrepreneurship Competition | | | |
| June | Science, Nature and Art Camp with high school students | | | |
| June | Science and Art Center Year End Concert | | | |
| July | International Youth Summer Camp | | | |
| August | National and International Youth Summer Camp | | | |
| July-August | Summer school | | | |
| September- October | BUCA IMSEF | | | |
| October-May | Young Achievement Company Program | | | |
| October-December | Science and Art Classes, Talent Workshops | | | |
| November | Science, Nature and Art Camp with Secondary and High School Students | | | |
| November- December | Online Creativity Competition | | | |

 Table 4.

 Kızılçullu Science And Art Center Sample Training Calendar For High School Students

| 6.3 | 1 0 0 | | | |
|---|---|--|--|--|
| Kızılçullu Science And Art Center Sample Training Calendar For High School Students | | | | |
| Date | Education Subject | | | |
| | What is Science? | | | |
| 1.Week | What is the Project? | | | |
| 1. week | What is Music? | | | |
| | Inventions Affecting Human History | | | |
| | Scientific Ethics | | | |
| 2.Week | Scientific Study Methods | | | |
| | Music Periods | | | |
| | Let's Know Scientists | | | |
| 3.Week | Nanotechnology | | | |
| | Music Periods | | | |
| | Renewable Energy | | | |
| 4.Week | Inventions Affecting Human History | | | |
| | Life of Famous Musicians | | | |
| | Black Holes, Discovery of Matter Waves, | | | |
| 5.Week | Displaying Black Holes | | | |
| | Introduction to the Quantum World | | | |
| | Getting to Know the musical instruments | | | |
| 6.Week | Biotechnology | | | |
| | | | | |

| | Nobel Awards | | | |
|----------|--|--|--|--|
| | Getting to Know the musical instruments | | | |
| | Nature Education and Endemic Species | | | |
| 7. week | Professions of the Future | | | |
| | Solfege and Choral Works | | | |
| | Smart Materials | | | |
| 8. week | Evolution of Scientific Thought and Modern Science | | | |
| - | Solfege and Choral Work | | | |
| 9. week | Test animals | | | |
| | The world's first minutes | | | |
| | Music and Math Relationship | | | |
| 10. week | Forensic Biochemistry | | | |
| | Sustainable Future | | | |
| 11. week | Piano Study | | | |
| | Biomimetics | | | |
| | Interesting Properties of Planets | | | |
| 12. week | Classical Western Music Instruments | | | |
| | Scientific Projects | | | |

Table 5.

Kızılçullu Science and Art Center Primary School Students Sample Weekly Work Program

| Kızılçullu Science And Art Center Primary School Students Sample Weekly Work Program | | | | | |
|--|------------------------------------|---------------------------------|-----------------------|--|--------|
| Monday | Tuesday | Wednesday | Thursday | Friday | Hour |
| Coding and robotics lesson | Healthy living skills | Fun Science and Project Work | Let's Know The Sky | Inventions that affect human history | 40 min |
| Coding and robotics lesson | Music education with cymbals | Fun Science and Project Work | Let's Know The Sky | Social Life Skills and Drama | 40 min |
| Storytelling | Music education with cymbals | Nature education | Nature education | Polyphonic choral work | 40 min |

 Table 6.

 Kızılçullu Science and Art Center Secondary School Students Sample Weekly Work Program

| Kızılçullu Science A | And Art Center S | econdary School S | Students Sample Wo | eekly Work Progra | ım |
|--|----------------------------------|--|--|--|--------|
| Monday | Tuesday | Wednesday | Thursday | Friday | Time |
| Philosophy for kids | Coding and Robotics Lesson | Science and technology study | Renewable energy | Astronomy education | 40 min |
| Polyphonic choral work | Coding and Robotics Lesson | Scientific Project Work | Piano- Solfeggio Training | Astronomy education | 40 min |
| Nature Education and Introduction of Endemic Species | Short Film Workshop | Let's get to know the Scientists | Nature Education and Introduction of Endemic Species | Inventions that affect human history | 40 min |

Short Summary

Science and Art Centers receive education of gifted students in Turkey is not sufficient both in number are also experiencing some problems in training at these centers. When the studies on this subject are examined, it is seen that the Science and Art Centers mostly encounter problems related to physical environment conditions and physical equipment such as materials, game tools, playgrounds, libraries and sports halls in the education of gifted students.

There are other important problems encountered in Science and Art Centers, insufficient in-service training of teachers and problems arising from the lack of regulation.

In this study, considering these problems encountered in Science and Art Centers, Kızılçullu Science and Art Center has been proposed as a new science and art center model to serve in İzmir's Buca district. Kızılçullu Science and Art Center is designed as a center where gifted students from kindergarten to university can receive special education from educator with master's and doctorate degrees, learn by living with science, art, nature camps and laboratory studies, and where students can receive education according to the curriculum created according to their interests. In Kızılçullu Science and Art Center, gifted students are guided in line with their interests and abilities, and they are provided to improve themselves according to these abilities. In the center, which has agreements with 51 international organizations, students are given the opportunity to develop their visions by participating in international organizations with their studies in the field of science and art.

In addition, BUCA IMSEF (BUCA International Music Science Energy Engineering Fair) international science and art competition will be held every year at the Kızılçullu Science and Art Center. Students studying at the center will also take part in this organization and will have the opportunity to make social, cultural, scientific exchanges and improve their foreign language with their peers.

As a result, Kızılçullu Science and Art Center a general model of Turkey such as Science and Art Center. With the implementation of this education system in Science and Art Centers, the problems encountered in the training will be largely resolved and gifted students will benefit more with active learning from these centers.

Biodata of Authors



Dr. Cansu İlke Kuru has received PhD in Biotechnology from Ege University. She has been a project consultant in scientific, social projects and European Union projects, has participated in the organization of national and international project competitions and has been a jury member. She has lots of articles published in international scientific journals. She participated in scientific congresses with oral and poster presentations. She is still working in Biochemist and Educator in of the Buca Municipality Kızılçullu Science and Art Center and Member of BUCA IMSEF Organization Committee. Research interests: Project based Learning, Science Education, Biochemistry, Biosensors, Nanotechnology. **Affilation:** Buca

Municipality Kızılçullu Science and Art Center **E-mail:** cansuilke89@gmail.com **Phone:** +905352933352 **ORCID:** 0000-0003-4290-6823



Belit Karaca has been teaching piano for 15 years. She has completed the "Preschool Prodigies Early Period Music Education Program" training and is a Preschool Prodigies instructor. It prepares students for international music certificate programs and competitions. She took part in the organization committee of national and international competitions. She has given many recitals in Turkey and abroad, worked with state artists and continues to give concerts with children. She is still working in Pianist and Educator in of the Buca Municipality Kızılçullu Science and Art Center and Member of BUCA IMSEF Organization Committee. Research interests: Music Education, Piano Education, Early Period Music Education Affilation: Buca Municipality Kızılçullu Science and Art Center E-mail:

karacabelit@hotmail.com **Phone:** +905057058941 **ORCID:** 0000-0001-9737-5383



Dr. Meltem Gönülol Çelikoğlu has received PhD in Physics from Dokuz Eylül University. She has worked as a project consultant and physics teacher in scientific and social projects, has taken part in the organizing committee of national and international project competitions and has been a jury member. She has articles published in international scientific journals. She participated in scientific congresses with oral and poster presentations. She is still working in Physicist and Educator in of the Buca Municipality Kızılçullu Science and Art Center and Member of BUCA IMSEF Organization Committee. Research interests: Project based Learning, Science Education, Physics **Affilation:** Buca Municipality Kızılçullu Science

and Art Center E-mail: g.meltem@gmail.com Phone: +905056316863 ORCID: 0000-0003-1618-9947



Ümit Karademir graduated from Ege University Chemistry Department. She worked as a chemistry teacher and school director for many years. She also worked as a manager in scientific, social responsibility and European Union projects. She participated in many national and international events. She represented Turkey in national and international organizations and won very important awards with her students. Also, she trained many students and teachers in the field of projects. She is still the manager of the Kızılçullu Science and Art Center, which is established in Izmir Buca Municipality. She is also the head of the national and international BUCA IMSEF organization which is a fair in the field of music

and science. She is the representative of 53 international organizations with BUCA IMSEF. Research interests: Gifted Education, Chemistry and Science Education, Project based Learning **Affilation**: Buca Municipality Kızılçullu Science and Art Center **E-mail**: umitedupro@gmail.com **Phone**: +905057058940 **ORCID**: 0000-0002-7076-567X

References

- Babaeva, J. D. and Voiskounsky, A. E. (2002). IT- Giftedness in students and adolescents. *Educational Technology & Society, 5*(1), 154-162.
- Batdal Karaduman, G. (2009). Üstün Yetenekli Öğrencilerde Başarı Düşüklüğünü Önlemek İçin Örnek Bir Model (An Exemplary Model for Preventing Low Achievement of Gifted Students.). *International Online Journal of Educational Sciences*, 1(1), 196-221
- Bildiren, A. (2018). Üstün yetenekli çocuklar (Gifted Children), Ankara: Pegem Akademi
- 4. 4. Çitil, M., 2018, Türkiye'de Üstün Yeteneklilerin Eğitimi Politikalarının Değerlendirilmesi (Evaluation of the Gifted Education Policy in Turkey). *Milli Eğitim Dergisi, 47* (ÖZEL SAYI 1), 143-172.
- Dağlıoğlu, H. E. (2010). Üstün Yetenekli Çocukların Eğitiminde Öğretmen Yeterlikleri ve Özellikleri (Teacher Competencies and Characteristics in the Education of Gifted Children). *Milli Eğitim Dergisi, 40*(186), 72-84.
- Davaslıgil, Ü. ve Zeana, M. (2004). Üstün zekâhların eğitimi projesi (Education project for gifted people). Kulaksızoğlu A., Bilgili A. E Şirin M. R. (Ed.). I. Türkiye üstün yetenekli çocuklar kongresi, üstün yetenekli çocuklar bildiriler kitabı. İstanbul: Çocuk Vakfı Yayınları, 85–100.
- Enç, M. (2005). Üstün beyin gücü gelişim ve eğitimleri (Superior brain power development and training). Ankara: Gündüz Eğitim ve Yayıncılık.
- Ersoy, O., Avcı, N. (2004). Üstün Zekalı ve Üstün Yetenekliler (Gifted Brain and Gifted Talented). I. Türkiye Ustün Yetenekli Gocuklar Kongresi Yayın Dizisi Seçilmiş Makaleler Kitabı, (pp. 200). İstanbul: Çocuk Vakfı Yayınları.
- Genç, M., A. (2016). Üstün Yetenekli Bireylere Yönelik Eğitim Uygulamaları (Educational Practices for Gifted Individuals), Üstün Zekâlılar Eğitimi ve Yaratıcılık Dergisi, 3(3), 49-66
- Heuser, B. L., Wang, K., & Shahid, S. (2017). Global Dimensions of Gifted and Talented Education: The Influence of National Perceptions on Policies and Practices. *Global Education Review*, 4(1), 4-21.
- Kadioglu Ates, H., & Afat, N. (2018). A Case Study Investigating the Language Development Process, Early Literacy Experiences and Educational Problems of a Gifted Child. *Journal for the Education of Gifted Young Scientists*, 6(4), 36-71.
- Kazu, İ., Y., Şenol, C. (2012). Views of Teachers about Gifted Curriculum (Case of BİLSEM), e-international journal of educational research, 3(2), 13-35.
- Kılıç, C. V. (2015). Türkiye'de Üstün ve Özel Yetenekli Çocuklara Yönelik Bir Eğitim Politikası Oluşturulamaması Sorunu Üzerine Bir Değerlendirme (Gifted and Talented Education Policy for Children is a problem in Turkey can not be created on an Evaluation), 21. Yüzyılda Eğitim ve Toplum, 4(12), 145-154.
- Kitsantas, A., Bland, L., & Chirinos, D. S. (2017). Gifted students' perceptions of gifted programs: An inquiry into their academic and social-emotional functioning. *Journal for the Education of the Gifted*, 40(3), 266-288.
- Levent, F., Bakioğlu, A. (2013). Üstün yeteneklilerin eğitiminde Türkiye için öneriler (Recommendations for Turkey in gifted education). Üstün Yetenekliler Eğitimi Araştırmaları Dergisi-Journal of Gifted Education Research, 1(1), 31-44.
- Milli Eğitim Bakanlığı. (2017). Beni Anlayın Özel Yetenekli Çocuğum Var (Understand Me I Have a Gifted Child), Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü, https://orgm.meb.gov.tr/meb iys dosyalar/2017 06/19122200 07143702 Aile EYitim KYlavuzu.pdf
- Muyia, M. H., Wekullo, C. S., & Nafukho, F. M. (2018). Talent development in emerging economies through learning and development capacity building. *Advances in Developing Human Resources*, 20(4), 498-516.
- Özkan, D. (2009). Yönetici, Öğretmen, Veli ve Öğrenci Görüşlerine Göre Bilim ve Sanat Merkezlerinin Örgütsel Etkinliği (Organizational Effectiveness of Science and Art Centers According to the Views of Administrators, Teachers, Parents and Students). Yüksek Lisans Tezi, Ankara Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara: Türkiye
- Öztabak, M. Ü. (2018). Özel/Üstün Yetenekli Çocukların Ailelerine Yönelik Rehberlik ve Psikolojik Danışmanlık (Guidance and Psychological Counseling for Families of Special / Gifted Children.). Eğitim ve İnsani Bilimler Dergisi: Teori ve Uygulama, 9(17), 79-106.
- Passow, A. H. (1981). The nature of giftedness and talent gifted, Child Quarterly, 25(1), 5-10.
- Renzulli, J. S. (1986). The Three Ring Conception of Giftedness: A Developmental Model for Creative Productivity. Cambridge: University of Cambridge Press.
- Sak, U., Ayas, M. B., Sezerel, B. B., Öpengin, E., Özdemir, N. N., & Gürbüz, S. D. (2015). Türkiye'de Üstün Yeteneklilerin Egitiminin Elestirel Bir Degerlendirmesi (Gifted and Talented Education in Turkey: Critics and Prospects). Türk Üstün Zekâ ve Egitim Dergisi, 5(2), 110.
- Sezginsoy, B. (2007), Bilim ve Sanat Merkezi Uygulamasının Değerlendirilmesi (Evaluation of Science and Art Center Application), Yüksek Lisans Tezi, Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü Eğitim Bilimleri Anabilim Dalı, Balıkesir: Türkiye.
- Streitz, R. (1922). Gifted students and provisions for them in our schools. University of Illinois Bulletin, 20 (13), 2-12.

- Tantay, Ş. (2010). Özel veya Üstün Yetenekli Çocuklara Eğitim Veren Okul ve Merkezlerin İncelenmesi(Investigation of Schools and Centers Providing Education for Special or Gifted Children). Yüksek Lisans Tezi, Maltepe Üniversitesi Sosyal Bilimler Enstitüsü Eğitim Bilimleri Anabilim Dalı, İstanbul: Türkiye.
- Akkutay, Ü. (1984). Osmanlı Ansiklopedisi (Ottoman Encyclopedia) (C.5). Ankara: Yeni Türkiye Yayınları.
- Levent, F. (2011). Üstün yeteneklilerin haklarını kim koruyacak (Who will protect the rights of the gifted?)? Beylikdüzü İlçe Milli Eğitim Müdürlüğü Eğitim Dergisi, 1(1), 22-23.
- Pak, M. D., & Özden, S. A. Üstün Yetenekli Çocukların Eğitim Hakkı (Gifted Children's Right to Education). *Türkiye Sosyal Hizmet Araştırmaları Dergisi*, 2(1), 1-24.
- Milli Eğitim Bakanlığı (2007). Milli Eğitim Bakanlığı Bilim ve Sanat Merkezi Yönergesi (Ministry of National Education Science and Art Center Directive). http://mevzuat.meb.gov.tr/html/2593_0.html
- Milli Eğitim Bakanlığı (2012). Özel Eğitim Hizmetleri Yönetmeliği (Special Education Services Regulation.). https://orgm.meb.gov.tr/meb_ivs_dosyalar/2012_10/10111226_ozel_egitim_hizmetleri_vonetmeli_gi_son.pdf



Journal of Gifted Education and Creativity, 8(2), 73-86, August 2021 e-ISSN: 2149- 1410 jgedc.org



Review Article

Main issues in counselling gifted children and youths ¹

Hanna David²

Tel Aviv University (emirata), Israel

Article Info

Received: 01 January 2021 Revised: 08 April 2021 Accepted: 21 July 2021 Available online: 15 August 2021

Keywords:
Counselling of gifted
Gifted education
Guidance

2149-1410/ © 2021 The Authors. Published by Young Wise Pub. Ltd. This is an open access article under the CC BY-NC-ND license



Abstract

Counselling gifted children and their families is of extreme importance for the future of science, technology, the financial situation of individuals, families, communities, countries and continents, and the ability to fight against hunger, poverty, lack of goodenough water and air-pollution, as well as improve the situation of those in need. It is of no less importance for the well-being of the young generation of scientists, artists, politicians, and as we have recently very well understood – health care professionals of all levels and in charge of all tasks responsible for our future and the future of the next generations. Good, supportive counselling those who help all these aims means navigating the gifted in the path that will make them materialize their gifts.

In order to make this happen it has to be kept in mind that there is no "prescription" that can be followed, neither "a set of recommendations". Each gifted child or adolescent is unique; every one of them is entitled to her or his "haute couture" dress or suit perfectly suited for them. However, here are some of the main issues most frequently discussed by parents, teachers, counsellors and psychologists of gifted children: The social situation of the gifted child/adolescent, Is there a "right time" for teaching a young child reading and writing? Mathematics? Science?, Class-skipping and the gifted child, Pros and cons of revealing the child's giftedness to the kindergartenor school-teacher, Dealing with the boredom of the gifted child in the school system, Is there a "most appropriate" class or school for the gifted student?, Afternoon activities for the gifted child: How many are "too many"?, Sibling-relationships in the gifted family, Parental authority and the gifted child, Planning the future education of the gifted adolescent. These are just a few of the issues I have been asked about for over three decades – mainly by parents and the team-members of the 55+ enrichment programs operating in Israel for gifted children. In this article I am to discuss - though in a nutshell – all of them.

To cite this article:

David, H. (2020). Main issues in counselling gifted children and youths. *Journal of Gifted Education and Creativity*, 8(2), 131-140.

Introduction

Chapter 1. The Social Situation of The Gifted Child and Adolescent, and Their Relationships with their Peers

The social situation of the gifted child and adolescent is always mentioned when gifted children or adolescents are discussed (e.g. David, 2019a; Cross, 2017; Hébert, 2011; Persson, 2007; Rinn, 2018). Usually, it is the very first question people want to know about gifted children. As there is no solid quantitative research about this widely discussed issue, I think that the origin of this question is the perception that there is some "natural justice" in the universe, and thus, if someone has received a gift of supreme intelligence, this person "must" have some problem. As many of the gifted of all ages are introvert (e.g. Bates, & Rock, 2004; Burruss, & Kaenzig, 1999; Dossey, 2016), and no less have a variety of interests, quite a large number of gifted children are not very active socially. As a result, quite often they are perceived as having social problems, while in fact they prefer to be isolated, sometimes estranged to their peers, not spend with others whom they find not interesting enough, not challenging, even boring. Thinking that your class-

² Prof., Tel Aviv University (emirata), Israel. E-mail: hannadav@tauex.tau.ac.il Orcid No: 0000-0002-7917-3152

¹ This paper was partially presented at 1st International Congress on Gifted Young Scientists Education (ICGYSE), 20-22 November 2020, Istanbul, Turkey.

mates are boring is not necessarily a prejudice or arrogance-related: being gifted means, in most cases, having high verbal abilities. A person with high verbal abilities expresses themselves more accurately than others, can read more complicated texts, understand conversations among professional adults when still young, and in many cases is not willing to listen to what is perceived by them as dull and inarticulate.

It can thus be concluded that as being gifted means usually having high level verbal abilities, gifted children have higher prospects to establish good relationships with others. Verbal abilities are the basis of social connections, as we all, starting from age 2 or 3, use words for communication. A gifted child, even when very young, has usually a larger vocabulary than their peers; can express themselves more clearly, and if they don't suffer from behavioral or emotional problems – will choose, usually at a much younger age than expected, to speak rather than get involved in physical acting-out. Such a child will often be praised by kindergarten- and school teachers and instructors, which will also contribute to their social status. Kindergartners and children in grade 1 and 2 usually want to be friends of their peers who are liked by the teacher, so the liking of the teacher contributes to the gifted child's social popularity.

Language proficiency is an advantage that contributes to the social life of gifted children also in the long run: they tend to establish deep, sincere connections once they find suitable friends; in many cases they cherish long-life-relationships; many of them even find their life-partner while still very young, get married at a young age and live a stable, comfortable life during which they have good prospects to materialize their gifts, as has been shown in the Terman's studies as well as others' (e.g. Burks et al., 1930; Cox, 1977; Janos, 1987; Oden & Terman, 1968; Seagoe, 1975; Sears, 1977, 1984; Terman, 1925, 1954a, b; Terman & Oden, 1935, 1947, 1959).

So why is there such a gap between the actual reality and the false image about the social situation of the gifted child?

Many gifted children feel very good in various social situations, like to belong to several social circles, initiate social parties, conferences, family-gatherings and the like. However, many others, especially the highly gifted, do not. Some of them practice "being social" while still young, and later feel as if it is "a waste of time", or think: "why am I doing it if it is not interesting? This change of behavior seems, for many parents and educators, "a deterioration of the social situation", and worries them. Quite often it happens that both [rents and educators feel they "must" "solve' the "social problem" of the gifted child, while there is actually no such problem.

In addition, many younger gifted children are social leaders, especially in kindergarten where quick understanding, self-expression ability and good performance are highly appreciated, so quite often the gifted child becomes a group leader. But when older, especially during adolescence, and even more often in adulthood, gifted people do not like in most cases to commit to the role of a leader. During the last decades quite a number of programs have been suggested in order to help gifted children and youths become social leaders (e.g. Karnes & Bean, 1996; Matthews, 2004; Ogurlu, & Sevim, 2017), but they have not proved to be a success. There are even studies showing that having an extremely high IQ is a disadvantage for a political leader... One of the main reasons the gifted population in general is not enthusiastic about leadership in many countries is that leaders need to love being with people; the gifted prefer, in many cases, to do other things.

But it seems that the main reason of the common belief about "the social problem of the gifted" it the human tendency to pay attention to the exception, to generalize from the irregular, from what stands out – to the general. We do not pay much attention to the gifted children who fit well, to the gifted youths whose life seem full of activities, who have man friends, to the gifted family whose members live in harmony, each of them develops their own interests, hobbies, sport-, art- music, etc. But we are fascinated by stories we have heard, movies or TV programs we have watched, or the few gifted people we have met – sometimes it was just one gifted person – who was unwillingly isolated, to the poor misfit. Most gifted people who have just a few friends are at least as happy as the gifted or the non-gifted whose social circle is much larger.

In addition, in many cases the number of friends needed has to do with the giftedness level. Usually when a child is highly gifted he or she needs a smaller number of friends for socialization-practicing, develop emotionally, and I general – feel good. But finding suitable friends is not always easy for the gifted child. When young, profoundly gifted children have quite frequently to make compromises, become friends with children they would not have chosen had they had an opportunity to spend time with children of the same- or similar cognitive level. When young, the child's opportunities to meet such children are limited; they usually meet other children in kindergarten or school, in the neighborhood they live, or among their family members. If they are lucky enough, as were the daughters of the Brontë family, for example (see, for example, Hancock, 2013), they have a large nuclear family with many gifted siblings, they do not suffer from isolation. But if they are not, isolation of young children can cause future difficulties. If a child

does not have at least one friend with whom they can practice mutual relationships, they might struggle in establishing relationships in the future due lack of both experience and proficiency.

Many gifted children have recently found online friends. This option has been existing for at least 20 years, but before the beginning of the covid-19 pandemic it was not considered satisfactory by parents, educators and counselors. Without intending to getting into the philosophical issue of "can online mates be considered 'real' friends?" there is no doubt that the social situation of a gifted child or adolescent who maintains connections with others, with whom they share interests, thoughts, aspirations or feeling, to whom they show their art, music or literature, is better than that of others who have neither actual friends nor online mates. In my experience, a child can be quite well adjusted if they have just one friend with whom they meet, while at the same time create a circle of online mates.

In summa: if a gifted child does not have friends it is NOT because of their giftedness; certainly not because of the "others": peers who do not accept gifted peers socially. Sometimes the gifted child lacks basic social skills, such as delaying gratification or being good losers. As for delayed gratification, we have all heard about the 1972 Stanford marshmallow experiment initiated by Walter Mischel. An excellent example of examining who is a good loser is my 1990 experience with the Tel Aviv University chess club. The club was willing to accept young players of all ages, but prior to registration each child has to play one single game when an instructor was watching. In all cases the child lost, as the instructor chose an opponent who was a better player than the new candidate. However, the decision whether to accept the child depended on the candidate, wo was sometimes just 4-year-old. If they managed to wipe their tears (metaphorical or actual), and ask to stay for another game – they were accepted. But if they continued weeping and could not be consoled, or did not cry but rather argued and made excuses for their loss – they were not. When you want to be a good chess player, you lose most of the time during the training sessions, as the better you become – you wish to play against someone who is on a higher level. But if you perceive your loss as a failure rather than an opportunity to learn – you will remain a bad loser, and your loss will be not only of the game but also of friends.

Chapter 2. Is There a "Right Time" for Teaching a Young Child Reading and Writing? Mathematics? Science?

The question whether there is a "right time" to teach a child to read and write, or maybe to do math or science, is of particular importance not only for counselors but also both for parents and teachers of young children. The reason for asking it is that while there is an almost-general consensus of teachers and counselors against teaching "too young" children, the fact is that many gifted kindergarten-children can read, some can also write, and very many can already do third grade math. Educators' attitude towards reading, writing and doing math depends also on the child's age: while more educators eagerly object to it when the child is 3 or 4-year-old, and certainly at a younger age, some comply with it, though do not recommend it for 5-year-old. As there are many "preparing to school" programs for 5-year-old, reading and writing, as well as doing math and science are sometimes perceived as an "investment in the child" future, which is a "proof" of their parents' dedication. Thus teaching 5-year-old is usually not publicly criticized, and kindergarten teachers or counselors who object to it cannot fight against it.

Parents of children younger than 5 who already read, write, or do math are criticized not only by professionals but also by other parents; this attitude contributes to the persistence of the opinion against "teaching young children". In my opinion the main reason for this attitude is jealousy. Comparison of children's achievements are unavoidable, and many parents who realize that such a comparison does not present their children as the brightest bulb, "blame" the parents of the child who reads of "teaching them". Instead of admitting that their child did not reach the developmental stage essential for reading, they insist that they are "against teaching a kindergartner".

The fact is that in almost all cases when a child who is just 3 and is interesting in letters, words, the structure of a sentence the parents are not "to blame". In my experience even when a 4-year-old starts reading, or doing math, it is the child rather than the parent who initiates the learning of reading or writing, asking number-questions or the names of geometrical shapes. The questions might appear when being busy with everyday activities, such as climbing the stairs, taking the elevator, or even walking along the street – when suddenly the child is interested in the difference of the stairs number between the first and the second floor, or in walking on one side of the street while announcing the even buildings' numbers in an ascending order and then walking back on the other side, while announcing the odd numbers in a descending order. The questions are usually presented unexpectedly, such as when a 5-year-old asks when shopping with her mother in the local supermarket: "why is it necessary to put a sign of an arrow when the word 'EXIT' is written so clearly on the sign?", or when at the entrance to a public toilet the child wants to know, why there are three rooms: one with the world "women", the other with "men", and the third with nothing written but with a wheelchair picture... One of the most frequently question asked by pre-school children is about word-length:

pointing at one word they have just acquired, let us say "mosquito", they ask: "why is the word 'mosquito' so much longer than 'dog"? dogs are much bigger than mosquitos? ".

There is always an option of not answering the child, or even worse – telling them that they are too young to understand the answer which they will get when "you are in school", "you are 6, or 7", or "when your teacher thinks it is it time to learn it". But each of these answers is not recommended. The inner message of each of them is: "you need not ask such questions", "we do not have time or patience for you or for your questions", or " you better get busy doing age-appropriate thigs". Such answers not only depress the child's curiosity; it also has a potential to "kill" their motivation to learn, while ruining the relationship between the child and the parent.

All parents should adopt one important rule: any question asked has to be answered. There are many questions whose answers cannot – and should not – be given when the child is not ripe yet, when they might shake them mentally or make them feel shame or guilty. Such questions should get but partial answers, but would not be perceived as lies. But when a child is striving to learn, to expand their knowledge, to widen their horizons – there is no reason why they should not get full answers. Questions about letters, words, the universe or its atoms, numbers or shapes shows that the child had acquired literacy, as well as scientifically and mathematically knowledge. So how can exact facts taught to a curious child interfere with their well-being?

As for worrying about other people's opinion about "teaching the child": I have never met a parent who refused to play ping pong with their 2-year-old, or to let their 3-year-old football. Why should the attitude towards helping the child who asks about what is considered "learning" be different? All children learn all the time. Before starting formal school their life is not divided between playing- and learning-time. They learn while playing, alone or with each other, and when they play, they learn about the world around them: about natural and social rules, about their own present abilities how to be a better climber, how to run faster, how to share things with others and how to overcome disappointments and obstacles. This brings us to another question related to school.

Chapter 3. Grade-skipping and the Gifted Child

Unfortunately, I do not know the answer to the frequently asked question whether it is "good" or bad" to skip a grade; whether it "should" or "should not" be done. Let us turn to history and try to learn from known facts about people who skipped at least one grade while in school.

Grade-skipping was much more popular in the past than it is now; it is also much more popular in underdeveloped-than in first-world countries. Surprisingly, or maybe not so, it happens much more often when gifted education is non-existent or is offered but to a very limited sub-population, mostly for the wealthier, more educated, and higher in the occupational ladder. These facts arise many questions, such as: "is grade-skipping a substitute means for education suitable for the gifted?"; "why has grade skipping been limited in highly industrial countries?"; "is grade-skipping practiced more frequently in some countries as means of saving expenses on those who leave school earlier than was expected?".

These questions, as well as many others, are of great importance. However, as a counselor I am interested only in one question regarding this issue: does grade- skipping contribute to the well-being of the child or adolescent, is it harmful to it, or maybe it is neither?

For many decades both philosophers, other theoreticians of education as well as child-psychologists, counselors and teachers have argued about the pros and cons of grade-skipping. In many countries, mine included, there are two distinctive opinions: the vast majority of mental-health- and education professionals are against grade-skipping, and a small majority stands for it. Thus, when the question of grade-skipping is discussed, and the parents need to find an educational psychologist who will diagnose the child in order to decide whether to recommend skipping or not, choosing a psychologist randomly for diagnosis will most probably result with no recommendation for grade-skipping. During the last 30 years I have received countless telephone-calls from parents starting with: "I want my child to skip a grade, and I call YOU because you are pro-skipping". Time and again I have to clarify that the fact that I wrote a few papers about grade-skipping does not make me a skipping-devotee. Making this mistake is not the parents' blame: being used to the very popular Israeli opinion, which altogether negates grade-skipping, makes them believe that if a professional is not against it – they must be in its favor.

Let us go back to history and look at the life-histories of the Nobel laureates. Almost all of them skipped at least one grade; quite a number skipped more than one. While they all materialized their giftedness, receiving the highest possible public recognition for their achievements, almost all of them had a long happy marriage, more children than the average families from a similar background, they lived longer and were healthier than others belonging to same

age-group. All these facts are not a "proof" for any advantage of their early grade-skipping, but it is at least a reinforcement of the assumption that grade-skipping does not result in long-lasting damage of any life aspect.

But while there is not answer to the general issue of pros and cons of grade-skipping, there is a definitive one for each child whose parents or educators deal with it: if the child is assessed for skipping, and if the conclusion of the professional chosen due to their expertise is that the child should skip a grade or enter school early – it is better for the child's well-being to follow this recommendation. A professional who comes to the conclusion that the child should skip a grade takes into consideration all social, emotional physical as well as cognitive aspects involved, rather than prejudices, half-truths and false beliefs.

Without getting to exact details of assessment for grade-skipping, or the "ripeness diagnosis, one must remember that there are quite good criteria for examining the child's readiness to skip a grade. For example: when observing the child from the physical and physiological points of view, the diagnostician keeps in mind that small boys tend to suffer among physically bigger boys; in many cases they are even bullied. Thus, the psychologist will be reluctant to recommend grade-skipping for a physically small boy even if he is mentally, emotionally and socially developed. On the other hand, big, especially fat girls tend to feel as outsiders both among "regular-size" girls and boys. Gifted girls whose puberty is precocious (see, for example, David, 2019b) should more often be recommended for grade-skipping as they tend to suffer from their double exceptionality; grade-skipping does not make either their giftedness or puberty disappear, but rather relieve the inconvenience they cause.

Before making the final decision about grade-skipping an important question has to be asked: is the skipping going to help closing the gap between the cognitive and the emotional developmental level of the child? The answer should be positive in order to decide for skipping. Closing this gap helps any child or adolescent build their emotional spine; it is, in a nutshell, the main aim of counseling in general and in counseling the gifted in particular. Grade-skipping is means of the counselor's toolbox; not using this tool because of some philosophy or belief is unprofessional, and in a conflict with the Hippocratic Oath.

Chapter 4. Pros and Cons of Revealing the Child's Giftedness to the Kindergarten- or School-Teacher

Revealing the child's giftedness to the kindergarten teacher or to the school-teacher is quite risky. I have already mentioned that they might be reluctant to hear about the child's giftedness. When the teacher is still an enigma to the parents, especially at the beginning of the school-year, it is recommended neither to reveal the giftedness nor to discuss it with anybody else in school, including the parents of the child's peers. After getting to know the teacher a little better, mainly two things have to be taking into consideration 1. Is the child going to benefit from their teacher's new knowledge? Is the label "gifted" going to make their life in school more interesting? More satisfying? Is the teacher going to be more emotionally supportive to them? 2. Assuming that the teacher knows the child is gifted and fully aware of the fact that such a child needs higher-level learning and more challenging assignments. Is the teacher able to offer the child any help in fulfilling their needs? If the answer is "no" to both questions, there is no reason to reveal the child's giftedness to the teacher.

Furthermore, there is a risk that by revealing the child's giftedness to a teacher that cannot help them the child's social and emotional situation will be deteriorated. A teacher that feels overwhelmed because of her difficulty to handle the class, to prepare the materials needed, or to be in charge of all her own tasks might react negatively towards both the gifted child and their parents. So it is better to save the efforts to "explain" her something which is beyond her ability to handle, something she cannot adjust to, or control (David, 2011).

Parents should keep in mind that highly professional teachers, who are both aware of the cognitive needs of the gifted child and are willing to "run the extra mile" in order to supply these needs, will probably identify the child's giftedness without parental help (about such teachers see, for example, David, 2015). Such excellent teachers will most probably approach the parents for discussing the child's giftedness...

In summa: In most cases revealing the child's giftedness to the teacher is not recommended. When the teacher has a gifted child or she had been diagnosed as gifted, such revealing would probably not be necessary, as her personal interest in giftedness will probably serve as lever for a fruitful cooperation between her and the parents of the gifted child. But in all other cases, unless the parent is sure that the teacher both wishes to help their gifted child and has the means required for it, it is recommended not to reveal the child's giftedness and lower all educational expectations.

Chapter 5. Dealing with the Boredom of the Gifted Child in the School System

Another issue that counselors of gifted children have to solve, as many children and parents need an answer to it, is the boredom of the gifted child in the school system.

Discussing the boredom of the gifted child in the school system has many points of view: that of the child, of the parent, of the teacher and of the counselor (David, 2018). They all have one common nominator: boredom is something that is "just there"; it cannot be denied, it does not "get better with time", or "disappear" when learning more or getting deeper into the subject. When a child says that they are bored, or when the teacher feels that her student is not interested in what goes on and rather does something else – the child is bored. Too often when a child is bored the are told to "have patience; if you just wait it is going to be interesting". Such a promise is an empty discourse; one should never promise things they cannot fulfil, and by doing that the teacher loses what had been left of the trust built with the gifted child.

Quite often a school counselor meets a gifted child after such promises have been made. In such cases the first task would be re-gaining the child's trust; this can be achieved by telling the plain truth to the child, namely, that most classes would probably be boring. It should also be explained that there are partial solutions that can ease the life of the child both during school-time and in the afternoons it. In my experience, even 7-year-old, especially when highly gifted, not only understand this "bitter truth" but are willing to go along with it. Many parents, as well as teachers think, that the truth should be presented to children in small doses. I have found that gifted children with no behavioral problems respond positively to the truth, and trust the person who does not try to "protect" them by covering it, while trying to "soften" the truth is an act perceived by many gifted children as lying due to their tendency to "see in black and white" (about moral sensitivity: see Silverman, 1994; Roeper, & Silverman, 2009).

The first task of the counselor of a gifted child is to make them adopt a new perspective of their boredom: rather than think it is all negative, realize that while one has nothing to do, it is possible to ruminate about abstract issues, new ideas, or anything that the child is interested in. In the modern school many children have been taught to believe that boredom is a "major enemy", while gifted children, especially gifted girls, need "time alone" (e.g. Burruss, & Kaenzig, 1999; Olszweski-Kubilius, Lee, & Thomson, 2014; Zorman & David, 2000). The boring hours ca be of use to every gifted child as "time alone" under certain circumstances.

But aside from teaching the gifted child how to deal with boredom, which is a crucial part of self-regulation instruction (on the importance of self-regulation for gifted children see, for example, (Housand, & Reis, 2008; Oppong, Shore, & Muis, 2019; Stoeger, & Zeidner, 2019; Tortop, 2015), gifted children can develop their ability to negotiate and compromise by discussing "doing other things in the classroom" with their teachers. When the child is very young, it is usually the parent who is involved in the negotiation, while the child learns "how coming-in-terms works". One such example if of an ADHD 6-year-old who had just started grade 1. As she had been reading at age 4, her mother told the teacher that in order to prevent the child from interrupting her peers, it would be easier to let her read during most of the day. Without mentioning the child's giftedness but rather her disability, the teacher agreed and let her read for the first 4 hours every day, during which she used to finish 3-4 books. Then, before the end of the school day, she joined her peers in painting, gym, the singing- or the choir class, or the woodwork workshop. Another example, is of a first grader mathematically gifted child (on mathematical giftedness in early age see, for example, David, 2002, 2012a, 2020a). The boy was allowed to take math with grade 4 students, which was convenient for the teacher who preferred this solution to his boredom problem rather than let him do his math work in her class. In that case the solution worked just for a few weeks: very soon the child had already acquired the math he was to be taught during the whole year, as once he had the textbook he learnt it by himself. This 6-year-old returned to his grade 1 classroom, and the teacher decided to let him do math at his own pace; his parents were responsible for checking his homework and making sure he took an exam each time he started learning a new subject.

These are just two of the very many potential solutions aimed to help the child to deal with their boredom in the classroom. In doing that many components have to be taken into consideration, such as the class-size, the availability of the space needed in order to the child do their own work, or the society of which the school belongs to: whether it is more cooperative or more individual (e.g. Dwairy, 2002, 2004a, b; Dwairy, & Menshar, 2006; Dwairy, & Achoui, 2006; Dwairy, Achoui, Abouserie, & Farah, 2006a, b; Dwairy, Achoui, Abouserie, Farah, Sakhleh, Fayad, & Khan, 2006). In more cooperative society it would be much harder for any teacher to teach a gifted child in a different way or at a different pace than in individual society, so it would be hard to recruit her for helping the gifted child in her classroom. Blaming the teacher for the child's boredom will never help, but as long as the adults in charge – mainly the parents and sometimes also the teachers – are willing to face this problem, there are ways to ease it. The main role of the counselor in such cases is to serve as the mediator between the child, sometimes directly and some other times – through their parents, and the school, usually presented by the teacher.

My "secret weapon" when it is hard to come to terms with the teacher, who insists about rules, the equality principle, or the jealousy that the classmates might feel towards the gifted child, is "the coffee-house invitation". In such cases I suggest to parents who need the teacher's cooperation for their gifted child to invite her for a coffee in a neutral place; a meeting over coffee and cake helps quite often to soften even the more rigid teacher who prefers to do things "by the book". However, the "coffee meeting" should be initiated by the parents at an early stage. In cases when the parents meet me after an "explosion" with the teacher, namely, after they had complained about her, blamed her and vice versa, I invite the teacher for a coffee, and leave the location for her to choose. Only after she agrees I ask politely if the parents — usually one of them — can also join us. Many overworked teachers are not used to be treated this way, so when I approach them it increases their readiness to accept unusual solutions to problems such as the boredom of the gifted child during classes.

Chapter 6. Is There a "Most Appropriate" Class or School for the Gifted Student?

Almost 50 years ago, when I was studying for my teacher's license in physics and mathematics at the Hebrew University of Jerusalem, I had to take the course: "the educational meaning of teaching science". The professor was the late Yeshayahu Leibowitz, an Israeli Orthodox Jewish public intellectual and polymath. He was professor of biochemistry, organic chemistry, and neurophysiology at the Hebrew University, as well as a prolific writer on Jewish thought and western philosophy. At that time, he was 70 years old, very young and energetic for his age. I still remember the very first sentence of his first lecture: "there is NO EDUCATIONAL MEANING to teaching science".

As I am also approaching 70, I feel an urge to shout aloud: "there is no such thing as "the most appropriate class for the gifted child". But instead of shouting I am just saying it now.

Unfortunately, the belief that "there is a better place for my gifted child" has caused many harms to many families of gifted children. For example: about 15 years ago an Ultra-Orthodox 9-child family, needed my help for their 10-year-old son. After being bored for four years in school they sent him to an out of town, where, they had been promised, the child would have been able to choose classes, skip the less interesting subjects and those he had already mastered, and learn at his own, accelerated pace. The new school was not religious; the child was the only one in the whole school who was wearing a yarmulke, the Jewish head-cover, so he not only behaved differently but also looked as "not belonging". But after the first semester the child, who had taken the more challenging classes, had nothing left to learn there, so he left the school and returned to his old, local one, along with his siblings and former religious friends. Had the parents known that the solution for the cognitive needs of the child would not be answered in that school, he would not have been pulled him out from his neighborhood, his childhood friends, and his basketball mates, but rather look for optional ways to enrich him at home, while relieving his school-boredom.

Another example goes back to the 80ies; it is about a state-religious family whose 8-year-old daughter could choose to stay in her religious school and participate in the local enrichment program for the gifted once a week, or transferring to the regional grade-3 gifted class, which was a part of a secular school. The parents opted for the second, and she left her local, religious school, commuted every morning over an hour to school and then back home. But she could not participate in any of the social activities as all of them took place during the weekends. On Sabbath, the holy day of Saturday, starting on Friday afternoon, no religious family drives, so the girl stayed at home. The girl could neither eat at her friends' houses, as their kitchens were not Kosher. When still in grade 3 or 4 she could not even explain her "food problem", as her friends had not yet heard about the food restrictions in Judaism... Only when they were a little older she solved the food problem by eating her preciously prepared food when occasionally visiting a friend, and managed to schedule weekdays social activities. In that case the child's cognitive needs were finally answered, but it took quite a long time and no less patience.

It can thus be concluded, that each school- or class choice has its advantages and disadvantages, its pros and cons.

Chapter 7. Afternoon Activities for the Gifted Child: How Many are "Too Many"?

Most gifted children are used to hear during their childhood, adolescence and even adulthood, that they are "too active", that they "do too many things", they are "obsessive" or even worse. The intensity of the gifted child has been widely discussed (e.g. Ackerman, 1997; Bouchet, 2005; Brennan, & Piechowski, 1991; Daniels, & Piechowski, 2009; Guthrie, 2019; Piechowski, 2006; Piirto, 2000), but it is still considered, many a time, a characteristic that should be hidden, should be "calmed" – especially, but not solely – for girls. An intensive gifted child or adolescent can accomplish a lot, can achieve highly in many subject-matters and life-areas, and they might be able to do it while still quite young. However, it is perceived by most other people, who are much less intense, as something that should be "calmed".

Let me start with an example taken from my own life: when quite young I used to speak very quickly, as if I was afraid my thoughts would run too quickly without leaving me time to express them vocally. When I started teaching, 48 years ago, my students complained of my speaking too fast. I apologized for my problem, promised to make an effort to speak slower, and asked the students to help me by raising their hands each time I needed to slow down. This was my first lesson about intensity, when reality forced me to apologize for something I had not thought about as my fault. That was also the first time I understood that even problems that are connected to personal characteristics that can hardly change, such as speech intensity as a part of general intensity, can be solved.

The next time I realized I was speaking too quickly was just a few years later, in 1979, when I gave my first presentation in an international conference. My subject was the Yiddish in the Responsa literature, a subject I find up to now fascinating. However, being just 26 years old, and presenting my study in English in front of a crowd of much older scholars, aroused my excitability, and "pushed me back" to my comfort zone of speaking very quickly. I finished my presentation in 8 minutes; nobody could understand anything, but most of the crowd was too polite to comment about it. The exception was a comparatively-young German scholar, who approached me and said: "Fraulein Ehrenstein [I used my maiden name; at that time "Fraulein" was not considered offensive yet...], from the few words I could grasp, your presentation seemed very interesting, but as you spoke so quickly, I could not understand most of it. Will you please send me the full version?"

The demand of "calming down" is not just about speaking. Counselors of gifted children hear it frequently in questions about afternoon activities, the school-load, sports, music – practically all possible interests and activities. A series of studies delivered by Milgram and her associates (e.g. Milgram, 2003; Milgram & Hong, 1999) has shown, that gifted children and adolescents are usually engaged in many more extra-curricular activities than the non-gifted. So when parents ask: "can my child participate in afternoon activities every single day of the week, sometimes in two" the answer would be, in most cases, "YES". What might be "too much" for one child, will probably be "not enough" for another. Parents have an important role in making sure their child eats well, sleeps well, and in general – seems satisfied. But by no means can they judge "how much is too much" for their child.

A final important remark: many studies have shown, that parents treat gifted boys as if they need more intensive leisure-activities differently than gifted girls (David, 2019b, 2020b). For example: boys are sent to accelerated math programs in a much higher rates than girls (e.g. David, 2008); boys are encouraged to have more hobbies than girls, many more boys than girls take multiple advanced subjects in high-school. Intense girls are perceived by society with much less tolerance than boys, but it is the parents' role to encourage their gifted girls to materialize their giftedness rather than hide – even be ashamed – of it. The counselor's role is to encourage the parents to let go prejudices and old-fashioned public opinions, so they can support both their gifted girls and boys.

Chapter 8. Sibling-relationships in the Gifted Family

As in many other subjects related to gifted children and adolescents, there are many prejudices about bad sibling relationships between the gifted child and his or her siblings. Many parents go as far as denying their gifted children the opportunity to participate in special programs for the gifted, as they are afraid of the deterioration of the siblings' relationships due to jealousy. In the last 30 years I have met too many adolescents and adults who were not told they had been diagnosed as gifted when children; when confronting their parents about it they were usually told that "had you been told that you were gifted, it would have been difficult to treat you and your brother/sister equally, and we believed that all children should get the same opportunities".

The perception about sibling relationships are damaged when only one sibling is gifted, has been based on beliefs, superficial observations and opinions rather than solid research. In my country, to the best of my knowledge, only one full-population study had been conducted on sibling relationships in the gifted family, and it revealed that the giftedness of one sibling had no influence of the sibling relationships (David, 2013; David, Gil, & Raviv, 2009). Thus, the belief of many parents that giftedness per se is the reason for bad sibling relationships is baseless.

This belief results, in many cases, in overcompensation of the non-gifted sibling, which has, by itself, high potential for feelings of injustice. In addition, many parents tend to claim that "if one child is gifted in mathematics or has exceptional verbal abilities, the other is gifted in sports". This utterance is not necessarily true. The intellectually gifted child can also be gifted in sports, and her sibling might not be gifted at all. False expectations have a high potential for causing bad relationships; this might be the case when one of the children has versatile gifts and the sibling does not show any special talent.

But it should also be taken into consideration that giftedness is highly hereditary (e.g. Rimm, Siegle, & Davis, 2018), so that when one child in the family is gifted, prospects are high that her or his siblings are gifted too. Findings from large samples have shown that

Brothers and sisters are usually within five or ten points in measured ability. Parents' IQ scores are often within 10 points of their children's; even grandparents' IQ scores may be within 10 points of their grandchildren's. We studied 148 sets of siblings and found that over 1/3 were within five points of each other, over 3/5 were within 10 points, and nearly 3/4 were within 13 points. When one child in the family is identified as gifted, the chances are great that all members of the family are gifted (Silverman, 2009).

Even among children with IQ of 170-194, usually occurring between 1:100,000 and 1:1,000,000, there was an extremely high percentage of families with two or more siblings in this range (Silverman & Kearney, 1989).

In addition to the fact of IQ similarity among siblings, there is an additional problem connected to the IQ-gap assumption: the questionable validity and reliability of giftedness identification. In my country the "giftedness tests" are neither valid nor reliable, and in many cases children with an IQ higher than 160 were diagnosed as "non-gifted" (e.g. cases studies, David, 2010, 2012b). When parents prevent their child who was diagnosed as gifted from getting the educational stimulations they need, while the sibling who had not been identified as gifted does get enrichment and support, the blunt discrimination would most probably be the reason for negative feelings rather than the giftedness per se.

Chapter 9. Parental Authority and the Gifted Child

Many parents of gifted children find it hard to discipline their gifted children. It is also a popular opinion, both among parents and scholars, and as *Vox populi*, *vox Dei* ["the voice of the people is the voice of God"], it is our task to examine this saying and find why do so many people think of it as absolute truth, and what should be done in order to prevent it.

Let me start with a "real life example". In one of my lectures to parents of grade 3 or 4 gifted children who just started participating in local enrichment programs for the gifted, the very first question was about parental authority. It was asked by the mother of tweens, a boy and a girl of 8, both participating in the program. She said, that when her son took a shower, he would leave the bathroom floor wet, the cloths spread all over, and the towel in the living room. There were also loud demands, such as: "will someone bring me a towel", and "did anybody see my underwear?' But when his teen sister tool a shower there are always enough towels, the floor remained dry and nothing is forgotten. "Why don't you make your son clean everything after every single time he takes a shower"?" I asked. The answer was "isn't it like that with boys? Are girls not 'naturally' tidy?" Only when I said "no", looked at her and waited till she processed my answer, I knew she started to understand that It was up to her whether her son would become an inconsiderate man, someone who waits for others to do things for him, or a person whose friends and family would be able to rely on.

Parental authority starts from the very basic instructions even a toddle must follow, such as not getting close to open fire or any electric instrument. It goes on to order-following, and as the child grows up – parents must insist that their child would follow the "house laws". This has nothing to do with the child's intelligence; gifted or not – as long as the child lives in their parents' home, the parents are in charge of setting the rules and are responsible for discipline the child.

The main difference between the gifted and the non-gifted regarding parental authority has to do with the age each new rule is presented and the explanations the parents supply. Unlike what many parents think, when the child is gifted, especially profoundly gifted, they can and should be disciplined at a younger age. For example: if a 2-year-old understands why it is dangerous to cross a road alone, or to run while crossing it, they should be praised every time they wait by a red traffic light and say aloud: "we are waiting for the green light". As for the explanations needed: the higher the IQ of the child is, the child needs less explanations. Children must get some explanations along with new rules or laws, especially when they include prohibitions and limitations. But when the child is not gifted, quite often the parent needs to repeat both the prohibitions and the reasons for them. When the child is gifted, on the other hand, too many explanations might start long discussions and arguments, and encourage controversy. If the parent is drawn to it the child might think that the law is negotiable, and possibly will be motivated to disobey future instructions and house-laws. Here is an example of what parents should NOT do in order to achieve parental authority.

A few years ago I taught a "Blockseminar", a 6-day intensive course on developmental issues of children and adolescents at the university of Klagenfurt, Austria. In order to have the students involved more deeply in the material

I asked each student to give an example of an incident, a case or a memory connected to parental authority – either from their own childhood or from others'. A 24-year-old Masters' student told us that when he was in grade 12, his mother had forbidden him to use his personal computer for half year because during the first semester of that year he did not obey her law of "no computer before finishing all school tasks". One of the other students asked how had the mother known he had not obeyed her, and the answer was: "she was not satisfied when she saw the half-year school reports so she assumed it was because of the computer's games".

I did not want to tell my student what I thought about the incident, but the other students were not as reluctant. They unanimously came to the conclusion that this act of the mother was not about parental authority, but rather imposing an un-proportional punishment because of an unproven "sin".

Chapter 10. Planning the Future Education of the Gifted Adolescent

Gifted children are very different from each other. Looking through the narrow IQ window, namely, defining giftedness just by measured verbal and mathematical-logical intelligence, the range of their IQ is usually about 70 points. During this conference we heard that in Saudi Arabia the minimal IQ for being eligible to be included in a gifted program is 120; in many countries it is 130; in my country – Israel – where giftedness is not measured by IQ either in the Jewish and most Arab sub-populations, there is an IQ criterion for Bedouins – the Nomads who live in the Negev, the desert and semi-desert region of southern Israel: a minimal IQ of 125. There is no upper-limit to the IQ of children who are accepted to gifted programs, but most IQ tests normally-used have a ceiling of about 160 (e.g. David, 2014a,b, 2016). However, as known from previous diagnoses, there have been children whose measured IQ was over 190 (e.g. Silverman, 2009). Thus, in many groups of gifted children the IQ range is about 70 points; most of the children are closer to the minimum of the minimal cutting point, while the minority, the profoundly gifted, are usually quite different from most of the others regarding their interests, abilities, gifts, and many personality traits (David, 2020c).

As a result, the only answer to the question about planning the future of the gifted child is "it depends on the child". There are gifted children who know, at a very early age, what they are interested in, even what profession they are to choose – and their life track is with accordance with this childhood plan. Others do not know until their late teens, sometimes until much later, what to choose, as they are good at many areas and interested in more.

Thus, the parents have one major role in helping to plan their child's future: NOT to push towards any profession, subject, or learning track. Parents should suggest to their gifted as well as non-gifted children to experience a variety of afternoon activities, courses, special programs, learning materials and everything they can financially and emotionally afford in order to satisfy their children's curiosity, motivation, and ambition to learn. But the final decision what to choose is not theirs, but their children's; as, according to Gibran Khalil Gibran (Arabic: جبران خلیل جبران جلیل جبران به بازی از معرفی (1883-1931), the notable Lebanese-American writer, poet, visual artist and philosopher had stated, their children do not belong to their parents. Here is his famous poem:

On children And a woman who held a babe against her bosom said, Speak to us of Children. And he said:

Your children are not your children.

They are the sons and daughters of Life's longing for itself.

They come through you but not from you,

And though they are with you yet they belong not to you.

You may give them your love but not your thoughts,

For they have their own thoughts.

You may house their bodies but not their souls,

For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.

You may strive to be like them, but seek not to make them like you.

For life goes not backward nor tarries with yesterday.

You are the bows from which your children as living arrows are sent forth.

The archer sees the mark upon the path of the infinite, and He bends you with His might that His arrows may go swift and far.

Let your bending in the archer's hand be for gladness;

For even as He loves the arrow that flies, so He loves also the bow that is stable.

* * *

These are just a few of the issues I have been asked about for over three decades – mainly by parents and the teammembers of the 55+ enrichment programs operating in Israel for gifted children. In this presentation I am to discuss – though in a nutshell – all of them.

THANK YOU!!!

Biodata of Authors



Hanna David received her PhD, "magna cum laude", from Ludwig Maximilians Universität, München and was a college lecturer in Psychology and literature. Dr. David's undergraduate studies started at the Hebrew university of Jerusalem where she majored in Physics and mathematics, and also graduated in Hebrew Literature. She received her Master's degree from the Jewish Theological Seminary in New York at age 22. She is currently a counselor for gifted students and their families; a well-known lecturer in national and international conferences of psychology, education, and giftedness, and an expert evaluator of research proposals for the European Commission. David has published widely in English, Hebrew, French and German, she has authored 18 books and 200+ papers. Dr. David is a licensed

Pilates instructor and practices yoga. **Research interests:** Mathematical education, giftedness, educational psychology, creativity, counseling, feminism **Affilation**: Tel Aviv University, Emerita **E-mail**: hannadav@tauex.tau.ac.il **Phone**: 972-39674748 **Orcid No**: 0000-0002-7917-3152 <u>AcademicEdu ResearchGate GoogleScholar</u>

Books:

David, H. (2000). Dynamic assessment of gifted children. New York: Nova Science Publishers.

David, H. (2020). On-line dynamic assessment of gifted children during corona-time. New York: Nova Science Publishers.

David, H. (2019). Emotionally, Socially and Learning Disabled Gifted Children: Theory and Treatment. New York: Nova Science Publishers.

David, H. (2016). Gifted children with learning disabilities or emotional/social problems (Hebrew). Retrieved from Hebrew Psychology: http://www.hebpsy.net/articles.asp?id=3476

David, H. (2015). The gifted girl: Case studies. Retrieved from http://www.hebpsy.net/articles.asp?id=3351

David, H. (2014). Demographic characteristics of students accepted to The Young Person's Institute for the Promotion of Creativity and Excellence: Findings in three decade-cohorts. Retrieved from http://www.hebpsy.net/articles.asp?id = 3216

David, H. (2014). The gifted child in school (Hebrew). Retrieved from http://www.hebpsy.net/articles.asp?id=3105

David, H. (2014). The gifted Arab child in Israel. Saarbruecken, Germany: Lambert Academic Publishing.

David, H. (2013). Parenting the gifted child (Hebrew). Retrieved from http://www.hebpsy.net/articles.asp?t=0&id=3021

David, H. (2011). The gifted child in the periphery: Studies in nurturing and teaching (Hebrew). Retrieved from http://www.hebpsy.net/articles.asp?t=0&id=2616

David, H., & Wu, E. (2009). Understanding Giftedness: A Chinese-Israeli Casebook. Hong Kong: Pearson Education South Asia.

David, H. (2009). Mathematics learning in the Israeli junior high school. The influence of gender, religion, grade, class-type, and religiosity on mathematics learning in the Israeli junior high school. Saarbrücken, Germany: VDM Verlag.

Ziegler, A., David, H. & Stöger, H. (2004). Male stereotype: An Empirical Study on the Effects of the Concept of a Successful Academic Person. *Ulmer Forsciungsberichte aus den Pädagogischen Psychologie, 8.* Universit of Ulm: Germany.

Zorman, R. & David, H. (2000). There is another way: Girls and women – Achievements and challenges. Jerusalem: The Henrietta Szold Institute and The Ministry of Education (Hebrew).

David, H. (1998). Index to Keshet [Rainbow]: A Literary Periodical + Introduction. Tel Aviv University.

David, H. (1995). The divorcing woman: Prejudices, truths and half-truths. Tel Aviv: Yaron Golan Publishing House.

David, H. (2017). Gifted Education in the Middle East. In: S. Pfeiffer, E. Shaunessy-Dedrick & M. Foley Nicpon (Eds.), *APA Handbook of Giftedness and Talent* (pp. 113-129). Washington, DC: APA Books.

Some Articles:

David, H. (2019). Shared parenting in the modern family from a feminist point of view. *Journal of Interdisciplinary Sciences*, 3(2), 36-54

David, H. (2019). Teaching Mathematically Gifted Students in Israel: The State of the Art. *Journal* for the *Education* of *Gifted Young Scientists*, 7(1), 57-69.

David, H. (2018). Problems and challenges of the gifted adolescent: School-related problems of the gifted adolescent. *Journal of Interdisciplinary Sciences*, 2(2), 113-131.

David, H. (2018). To be a gifted adolescent. Journal of Interdisciplinary Sciences, 1(2), 8-23.

David, H. (2018). 4.5-5.5-year-old gifted students: Findings from the 2004 cohort of the Erika Landau Institute. *Scholarly Journal of Psychology and Behavioral Sciences*, 1(4), 75-81.

David, H. (21.1.2018). Ten questions frequently asked by parents of children participating in enrichment programs for the gifted (Hebrew). Retrieved from https://www.hebpsy.net/articles.asp?t=0&id=3634

te Nijenhuis, J., van den Hoek, M., Metzen, D., & David, H. (2017). Spearman's hypothesis not supported? Three metaanalyses of Black and White prisoners, Northeast Asians, and Arabs and Jews. *Personal and Individual Differences, 117*(1), 52-59.

David, H. (2017). Giftedness – How does it work with Sensitivities, learning disabilities, and disorders. *Journal of Interdisciplinary Sciences*, 1(1), 61-75.

David, H. (2017). Seeking help for young gifted children with emotional or educational problems: Who looks for counseling? Part I: Between the telephone call and the meeting. *Journal for the Education Gifted Young Scientists*, 5(1), 57-70.

References

- Ackerman, C.M. (1997). Identifying gifted adolescents using personality characteristics: Dabrowski's overexcitabilities. *Roeper Review*, 19(4), 229-237.
- Bates, T.C., & Rock, A. (2004). Personality and information processing speed: Independent influences on intelligent performance. *Intelligence*, 32(1), 33-46 https://doi.org/10.1016/j.intell.2003.08.002
- Bouchet, N. M. (2005). To give or to take? Assessing five levels of moral emotional development. Dissertation Abstracts International Section A: Humanities & Social Sciences. Vol 65(7-A), 2005, 2782. US: Univ Microfilms International.
- Brennan, T., & Piechowski, M. M. (1991). A developmental framework for self-actualization: Evidence from case studies. *Journal of Humanistic Psychology*, 31(3), 43-64.
- Burks, B.S., Jensen, D.W., & Terman, L.M. (1930). Genetic studies of genius, vol. 3: The promise of youth. Stanford, CA: Stanford University Press.
- Burruss, J. D., & Kaenzig, L. (1999). Introversion: The often forgotten factor impacting the gifted. *Virginia Association for the Gifted Newsletter, 21*(1). Retrieved from https://www.davidsongifted.org/search-database/entry/a10274
- Cox, C.M. (1977). Background characteristics of 456 gifted students. Gifted Child Quarterly, 21, 261-267.
- Cross, T.L. (2017). On the Social and Emotional Lives of Gifted Children (5th ed.). Woodway, TX: Prufrock Press
- Daniels, S., & Piechowski, M. M. (2009). Living with intensity: Understanding the Sensitivity, Excitability and Emotional Development of Gifted Children, Adolescents and Adults. Scottsdale, AZ: Great Potential Press.
- David, H. (2002). Geometry in the Israeli kindergarten. In W. Peschek (Hrsg.). Beiträge zum Mathematikunterricht. Vorträge auf der 36. Tagung für Didaktik der Mathematik vom 25. Februar bis 1. März 2002 in Klagenfurt (S. 143-146). Hildesheim und Berlin: Verlag Franzbecker.
- David, H. (2008). The mathematics acceleration program of the Tel Aviv University (1970-1999). In R. Leikin (Ed.), *Proceedings of The 5th International Conference* Creativity in Mathematics and the Education of Gifted Students (pp. 427-429). Haifa, Israel, February 24-28, 2008.
- David, H. (2010). Gifted Case Studies: Keynote. In A. İşman & Z. Kaya (eds.), International Conference on New Horizons in Education: Proceedings book (pp. 7-23). Famagusta, Cyprus, 23rd-25th June 2010.
- David, H. (2011). Teachers' Attitude: Its importance in nurturing and educating gifted children. *Gifted and Talented International*, 26(1-2), 65-80.
- David, H. (2012a). Mathematical giftedness in early childhood. *International Journal of Research in Management, Economics and Commerce*, 2(12), 19-31.
- David, H. (2012b). Ethical issues in educating and counseling the gifted. Gifted Education Press Quarterly, 26(3), 7-13.
- David, H. (2013). Gifted children and their siblings: On research, opinions, beliefs and facts (in Hebrew). *PsychoActualya*, January issue, 46-51.
- David, H. (2014a). Why is diagnosing the gifted in Israel so problematic? On the problems of diagnosing gifted children and the difficulties in de-ciphering such diagnoses. *Australasian Journal of Gifted Education*, 23(1), 49-58.
- David, H. (2014b). The gifted Arab child in Israel. Saarbrücken, Germany: Lambert Academic Publishing.
- David, H. (2015). Does the gifted student need a gifted teacher? Gifted Education Press Quarterly, 30(4), 7-17.
- David, H. (2016). Diagnostic et enseignement pour les enfants hp: l'exemple d'Israël. Revue économique et sociale, 74(4), 103-112 [English version: Diagnosing and schooling of gifted children: The example of Israel].
- David, H. (2018). Problems and challenges of the gifted adolescent: School-related problems of the gifted adolescent. *Journal of Interdisciplinary Sciences*, 2(2), 113-131.
- David, H. (2019a). Emotionally, Socially and Learning Disabled Gifted Children: Theory and Treatment. New York: Nova Science Publishers.
- David, H. (2019b). Why is the rate of gifted girls' parents seeking help for their daughters is much lower than that of boys'? The gender aspect. In H. David (Ed.), *Understanding Gifted Children: Perspectives, Gender Differences and Challenges.* New York: Nova Science Publishers.
- David, H. (2020a). On-line identification of mathematical giftedness: Case study of a 3-year-old girl in Israel. In On-line dynamic assessment of gifted children during corona-time (pp. 15-49). New York: Nova Science Publishers.
- David, H. (2020b). Personal summary: A Good Jewish Girl Should Watch Her Language. In On-line dynamic assessment of gifted children during corona-time (pp. 126-142). New York: Nova Science Publishers.
- David, H. (2020c). The conditions for establishing a therapeutic alliance between the counselor and the gifted client. Proceedings of the 1st International Congress on gifted Young Scientists Education (ICGYSE). Istanbul, Turkey: 20-22 October 2020.
- David, H., Gil, M. & Raviv, I. (2009). Sibling relationships among Eilat families with at least one gifted child. *Gifted and Talented International*, 24(2), 71-88.
- Dossey, L. (2016). Introverts: A Defense. Explore: The Journal of Science and Healing, 12(3), 151-160. DOI: 10.1016/j.explore.2016.02.007
- Dwairy, M. (2002). Foundations of a psycho-social dynamic personality theory of collective people. *Clinical Psychology Review*, 22(3), 343-360.
- Dwairy, M. (2004a). Parenting styles and mental health of Arab gifted adolescents. Gifted Child Quarterly, 48(4), 351-352.
- Dwairy, M. (2004b). Individuation among Bedouin versus urban Arab adolescents: National, ethnic and gender differences. *Cultural Diversity and Ethnic Minority Psychology*, 10(4), 350-360.
- Dwairy, M, & Achoui, M. (2006). Introduction to three cross-regional research studies on parenting styles, individuation, and mental health in Arab societies. *Journal of Cross-Cultural Psychology*, 37(3), 221-229.
- Dwairy, M., Achoui, M., Abouserie, R., & Farah, A. (2006a). Adolescent-family connectedness among Arabs: A second cross-regional research study. *Journal of Cross-Cultural Psychology*, 37(3), 248-261.

- Dwairy, M., Achoui, M., Abouserie, R., & Farah A. (2006b). Parenting styles, individuation, and mental health of Arab adolescents: A third cross-regional research study. *Journal of Cross-Cultural Psychology*, *37*(3), 262-272.
- Dwairy, M., Achoui, M., Abouserie, R., Farah, A., Sakhleh, A.A., Fayad, M., & Khan, H.K. (2006). A first cross-regional research study. *Journal of Cross-Cultural Psychology*, 37(3), 230-247
- Dwairy, M., & Menshar K. E. (2006). Parenting style, individuation, and mental health of adolescents in Egypt. *Journal of Adolescence*, 29(11), 103-117.
- Guthrie, K.H. (2019). "Nothing is ever easy": Parent Perceptions of Intensity in Their Gifted Adolescent Children. *The Qualitative Report*, 24(8), 2080-2101. Retrieved from https://nsuworks.nova.edu/tgr/vol24/iss8/16
- Hancock, S. (Producer) (2013, March 31). Gareth Williams: The Brilliant Brontë Sisters: A Documentary [Television Broadcast]. ITV. Hébert, T. P. (2011). Understanding the Social and Emotional Lives of Gifted Students. Waco, TX: Prufrock.
- Housand, A., & Reis, S.M. (2008). Self-Regulated Learning in Reading: Gifted Pedagogy and Instructional Settings. *Journal of advanced academics*, 20(1), 108-136. Doi: 10.4219/jaa-2008-865
- Janos, P. (1987). A fifty-year follow-up of Terman's youngest college students and IQ-matched age mates. *Gifted Child Quarterly*, 31(2), 55-58.
- Karnes, F.A., & Bean, S.M. (1996). Leadership and the gifted. Focus on Exceptional Children, 29(1), 1-16. DOI: 10.17161/foec.v29i1.6859
- Matthews, M. S. (2004). Leadership education for gifted and talented youth: A review of the literature. *Journal for the Education of the Gifted, 28*(1), 77-113. Doi: 10.1177/016235320402800105
- Milgram, R.M. (2003). Challenging Out-of-school Activities as a Predictor of Creative Accomplishments in Art, Drama, Dance and Social Leadership. *Scandinavian Journal of Educational Research*, 47(3), 305-315.
- Milgram, R.M., & Hong, E. (1999). Creative out-of-school activities in intellectually gifted adolescents as predictors of their life accomplishment in young adults: A longitudinal study. *Creativity Research Journal*, 12(2), 77-87. DOI: 10.1207/s15326934crj1202_1
- Oden, M.H. & Terman, L.M. (1968). The fulfillment of promise: 40-year follow-up of the Terman gifted group. *Genetic Psychology Monographs*, 77(1), 3-93.
- Ogurlu, U., & Sevim, M.N. (2017). The opinions of gifted students about leadership training. *Journal of Ethnic and Cultural Studies*, 4(2), 41-52
- Olszweski-Kubilius, P., Lee, S.Y., & Thomson, D. (2014). Family environment and social development in gifted students. *Gifted Child Quarterly*, 58(3), 199-216.
- Oppong, E., Shore, B.M., & Muis, K.R. (2019). Clarifying the connections among giftedness, metacognition, self-regulation, and self-regulated learning: Implications for theory and practice. *Gifted child Quarterly*, 63(2), 102-119. Doi: 10.1177/0016986218814008
- Persson, R.S. (2007). The myth of the antisocial genius: A survey study of the socio-emotional aspects of high-IQ individuals. *Gifted and Talented International*, 22(2), 19-33.
- Piechowski, M. (2006). "Mellow out," they say. If I only could. Intensities and sensitivities of the young and bright. Madison, WI:
- Piirto, J., Cassone, G., Ackerman, C., & Fraas, J. (1996). An international study of intensity in talented teenagers using the Overexcitability Questionnaire. Paper presented at Dabrowski Conference, Calgary, Alberta, Canada, May 23, 1996.
- Piirto, J. (2000). The Piirto Pyramid of talent development. *Gifted Child Today*, 23(6), 22-29. Doi: 10.1177/107621750002300608 Rimm, S.B., Siegle, D., & Davis, G.A. (2018). *Education of the Gifted and Talented* (7th Ed.). New York: Pearson.
- Rinn, A.N. (2018). Social and Emotional Considerations for Gifted Students. In S. Pfeiffer, E. Shaunessy-Dedrick & M. Foley Nicpon (Eds.), *APA Handbook of Giftedness and Talent* (pp. 453-464). Washington, DC: APA Books.
- Roeper, A., & Silverman, L.K. (2009). Giftedness and moral promise. In D. Ambrose, & T. Cross (Eds.), Morality, ethics, and gifted minds (pp. 251-264). New York: Springer. DOI: 10.1007/978-0-387-89368-6.
- Seagoe, M.V. (1975). Terman and the gifted. Los Altos, CA: W. Kaufmann.
- Sears, R.R. (1977). Sources of life satisfaction of the Terman gifted men. American Psychologist, 32(2), 119-128.
- Sears, R.R. (1984). The Terman gifted children study. In S.A. Mednick, M. Hanway, & K.M. Finello (Eds.) *Handbook of longitudinal research volume 1: Birth and childhood cohorts.* New York: Praeger.
- Silverman, L.K. (1994). The moral sensitivity of gifted children and the evolution of society. *Roeper Review*, 17(2), 110-116. Doi:/10.1080/02783199409553636
- Silverman L.K. (2009). What have we learnt about our gifted children? 30th Anniversary 1979-2009. Retrieved from https://www.gifteddevelopment.com/articles/what-we-have-learned-about-gifted-children
- Silverman, L.K. & Kearney, K. (1989). Parents of the extraordinarily gifted. Advanced Development, 1, 1-10.
- Stoeger, H., & Zeidner, M. (2019). Self-regulated learning in gifted, talented, and high-achieving learners. *High Ability Studies, 30*(1-2), 1-8. DOI: 10.1080/13598139.2019.1601326
- Terman, L.M. (1925). Mental and physical traits of a thousand gifted children. Genetic studies of genius, vols. 1 & 2. Stanford: Stanford UP.
- Terman. L.M. (1954a). The discovery and encouragement of exceptional talent. American Psychologist, 9(6), 221-230.
- Terman, L.M. (1954b). Scientists and non-scientists in a group of 800 gifted men. Psychological Monographs, 68(7), 1-44.
- Terman, L.M. & Oden, M.H. (1935). The promise of youth. Genetic studies of genius, vol. 3. Stanford: Stanford UP.
- Terman, L.M. & Oden, M.H. (1947). Genetic studies of genius. vol. 4: The Gifted Child Grows Up: Twenty-five years' follow-up of a superior group. Stanford UP, Stanford CA.
- Terman, L.M. & Oden, M.H. (1959). The gifted group at mid-life: 35 years' follow-up of the superior child. Stanford, CA; Stanford University Press.
- Tortrop, H.S. (2015). A comparison of gifted and non-gifted students' self-regulation skills for science learning. *Journal for the Education of Gifted Young Scientists*, 31(1), 42-57.

Zorman, R. & David, H. (2000). There is another way: Girls and women – Achievements and challenges (in Hebrew). Jerusalem: The Henrietta Szold Institute and The Ministry of Education.

Journal of Gifted Education & Creativity



ISSN: 2149-1410