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AN OVERVIEW ON THE EDUCATION OF GIFTED/TALENTED STUDENTS IN TURKEY

Annotation. *In recent years, gifted/talented education started to gain importance in Turkey as in the rest of the world. Within this scope, 135 Science and Art Centers were established in 81 cities in Turkey by 2018. Gifted and talented students are very crucial for the future of the country. They will also lead and affect to the country in many ways. In the literature, there are a wide variety of definition and theory related to the intelligence. Developmental approaches focus on precocious abilities or specific skills as the key components in the recognition of gifted/talented children in the early years. It is seen that gifted/talented children are more advanced in terms of cognitive skills than their normal peers. There is a certain consensus in child and adolescent development theories that does not exist in the field of giftedness. While there are no difficulties in improving the academic achievement of gifted students, there are difficulties in improving their emotional intelligence and skills of overcoming socialization problems. It has been known that gifted children have different social and emotional characteristics compared to their peers and are at risk for mental health. In order for gifted children to become biopsychosocially healthy adults, it is important to determine the levels of intelligence at an early age, to maintain appropriate education for superior intelligence, to guide their emotional needs, and to inform parents and teachers. In this study has been evaluated generally the education of gifted/talented children in Turkey. In this context was conducted a literature review.*

Key words: *giftedness/talented, natural ability, characteristics of gifted/talented students, identification of gifted students, Science and Art Center.*

Анотація. *Останніми роками освіта обдарованих/талановитих почала набувати значення в Туреччині, як і в усьому світі. У рамках цього плану до 2018 року в Туреччині було створено 135 наукових і мистецьких центрів у 81 місті. Обдаровані й талановиті студенти мають велике значення для майбутнього країни. Вони також вплинуть на країну багатьма способами. У літературі існує велика різноманітність визначень і теорій, пов'язаних з інтелектом. Розвиваючі підходи зосереджуються на ранніх здібностях або конкретних навичках як ключових компонентах у визнанні обдарованих/талановитих дітей у перші роки. Видно, що обдаровані/талановиті діти є більш просунутими з точки зору когнітивних навичок, ніж їхні звичайні однолітки. У теоріях розвитку дітей і підлітків існує певний консенсус, якого немає в області обдарованості. Хоча немає труднощів у покращенні навчальних досягнень обдарованих учнів, є труднощі у вдосконаленні їхнього емоційного інтелекту та навичок подолання проблем соціалізації. Відомо, що обдаровані діти мають інші соціальні та емоційні характеристики порівняно з їхніми однолітками та знаходяться у групі ризику для психічного здоров'я. Для того, щоб обдаровані діти стали біопсихосоціально здоровими дорослими, важливо визначити рівні інтелекту в ранньому віці, підтримувати відповідну освіту для вищого інтелекту, керувати їхніми емоційними потребами та інформувати батьків і вчителів. У цьому дослідженні було оцінено загальну освіту обдарованих/талановитих дітей у Туреччині. У цьому контексті було проведено огляд літератури.*

Ключові слова: *обдарованість/талановитість, природні здібності, характеристики обдарованих/талановитих учнів, ідентифікація обдарованих учнів, науково-мистецький центр.*

Introductıon. In recent years, gifted/talented education started to gain importance in Turkey as in the rest of the world. Within this scope, 135 Science and

Art Centers (SACs –BİLSEM) were established in 81 cities in Turkey by 2018 (Yazıcı, 2019: 7) [25]. Science and Art Centers (SACs) are the special education centers where elementary, middle and high school gifted students go after their school or in weekends. Their aim is to support students in three different areas: painting, music and general cognitive skills (MEB, 2016) [11]. Therefore, Science and Art Centers (SACs) are established in Turkey at the beginning of 1990s. Moreover, in 2014, MoNe's General Directorate of Special Education Guidance and Counseling Services prepared a guide for parents whose children are gifted. There are three parts in this guide; children special talent, advice for parents and SACs. Turkey, as other nations, has given prime importance especially in last three decades to train gifted students better and get benefit from their contribution in order to create a capacity in the competition to lead new innovations in the World (Yazıcı, 2019: 14) [25]. Gifted and talented students are very crucial for the future of the country. They will also lead and affect to the country in many ways. In the literature, there are a wide variety of definition and theory related to the intelligence. In this paper a general was evaluated the education of gifted/talented students in Turkey (İnnalı, 2017: 75) [8].

Method. In this study was conducted a literature review.

Lıterature review.

1. What is giftedness/talented?

The definition and determinations of intelligence and giftedness have long times received much attention especially in several centuries both in Turkey and World. In the literature, there are a wide variety of definition and theory related to the intelligence. Different cultures have provided diverging definitions of giftedness and proposed several methods for identifying gifted. Developmental approaches focus on precocious abilities or specific skills as the key components in the recognition of gifted children in the early years (Coleman & Cross, 2005 [3]; Renzulli & Reis, 1985) [16]. The idea of multiple intelligences leads to new ways of thinking about students who have special gifts and talents. Traditionally, the term gifted referred only to students with unusually high verbal skills.

Giftedness; designates the possession and use of untrained and spontaneously expressed natural abilities (called outstanding aptitudes or gifts), in at least one ability domain, to a degree that places an individual at least among the top 10 per cent of age peers.

Talented; designates the outstanding mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places an individual at least among the top 10 per cent of age peers who are or have been active in that field or fields.

There are two common points between these two terms: both are about ability and being above average (Gagne, 2004) [7]. *Giftedness/talented* is extraordinary ability, creative thinking and defined as a combination of job responsibilities (Renzulli & Reis, 1985) [16]. Therefore, regardless of the definition, gifted and talented students are special, and they have special needs. The percentage criteria for gifted students differ from country to county. While it varies 1% to 10%, in Turkey, the top two out of 100 people are accepted as gifted. Gifted people can lead the society with their motivation, will power, leadership ability and creative problem-solving ability. They also speed up development and alteration of their country (Ministry of National Education, 2013[11]; cited in Yazıcı, 2019: 15) [25]. The most common characteristics for gifted students are having excellent memory, being highly sensitive, having large vocabulary knowledge, desiring to organize people, having deep, intense feelings and reactions as reported by National Association for Gifted Children (NAGC, n.d.). These characteristics can be seen as both luck and unluckiness because they can cause both positive and negative situations in the lives of gifted students. For instance, through having excellent memory, gifted students may be bored and impatient in class or by the reason of using advanced vocabulary, they may become alienated from their peers and may have some social-emotional difficulties such as anxiety, perfectionism, stress, or issues with peer relationships (NAGC, 2016) [12].

2. Models are used in the education of gifted students in Turkey

There are differences in countries' perspectives on giftedness and their education systems. Therefore, there are various models and strategies for the education of the gifted (Akarsu, 2004 [1]; Schiever & Maker, 2003) [20].

The following 3 models are generally used in the education of gifted students in Turkey:

2.1. Acceleration model: (Early start to primary school, fast progress, grade skipping through exams, taking classes with the upper classes, taking the exam without reading the course, taking some courses from university, early admission to university, early admission to university, etc.).

2.2. Grouping model: (Having children with similar interests and abilities together, full-time homogeneous classes or heterogeneous classes for them to work together, half-day or temporary groupings, half day private classes, making in-class and out-of-class groupings such as «school within school», etc.)**.**

2.3. Enrichment model: (Arranging education programs according to the needs of gifted children and study with their peers).

3. Psychological Framework for Gifted Children's (Fig. 1).

4. Gifted Children in Turkey Educational Evaluation/Diagnostics and Placement Process

Directorate of Special Education Guidance and Counseling Services in MoNe is responsible for gifted education in Turkey. The history of gifted education dates to the 15th century (Sak, 2010) [17]. In Ottoman Empire, Enderun School was the first school to train gifted children. The aim was to educate and prepare them for the leadership in the empire (Çalık & Birgili, 2013) [4].

After the establishment of the Turkish Republic in 1923, education evolved into a more Western-oriented style and was used as the major instrument to educate human resources to compete with the world. Gifted education practices before the twenty first century can be considered as prototypes developed by the MoNE.

Program models for the gifted started to be more enriched and diversified with the new century because gifted education began to attract different agencies and institutions (Kanlı & Özyaprak, 2015) [10].

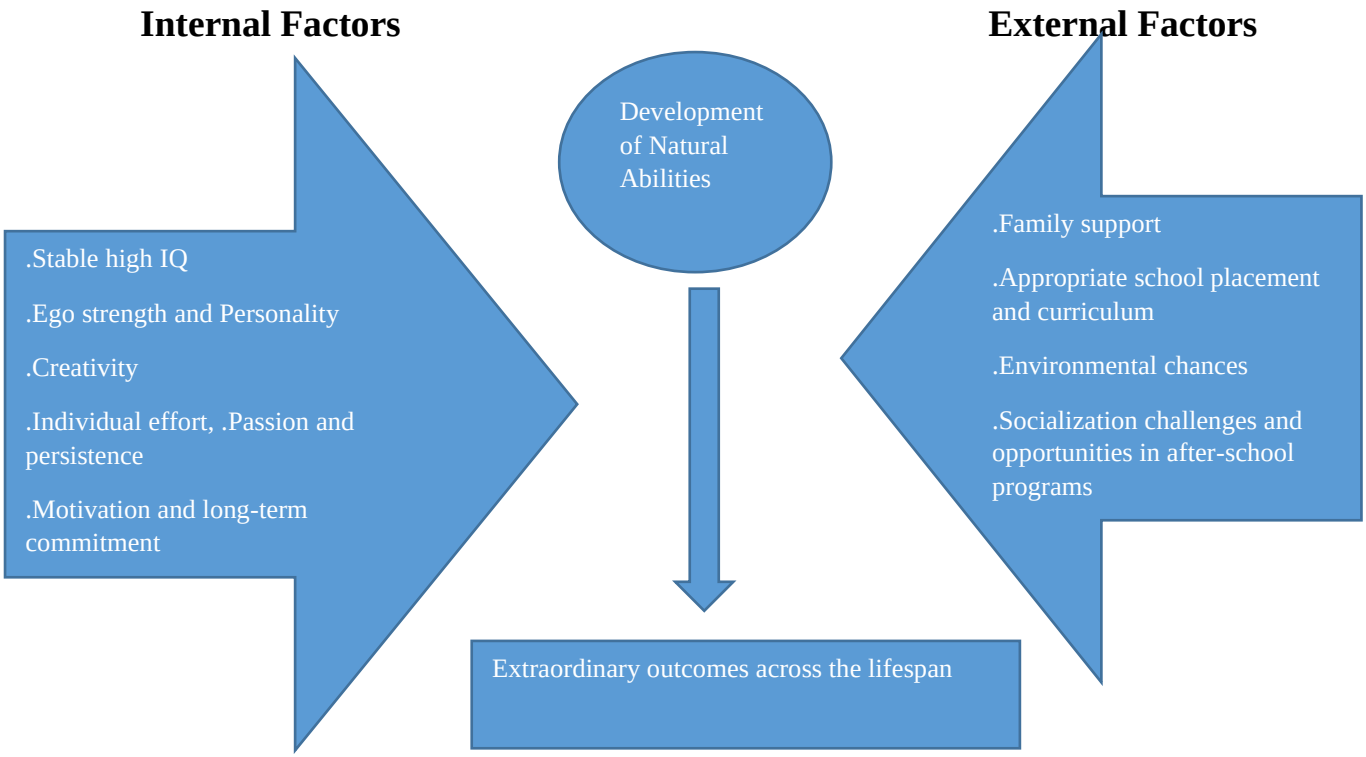

Fig. 1. Internal and External Factors Impacting upon the Natural Abilities and Outcomes of Gifted Children *(cited in, Papadopoulos, 2020: 307) [14].*

The brief information about the educational program in Turkey is below:

1. Beyazıt Ford Otosan Primary School (BFOPS): The school offered special education for gifted based on the bilateral agreement between the MoNE and University of Istanbul and the protocol aimed to develop a culture-specific differentiated program in order to meet the needs of gifted learners.

2. Private Schools: As the awareness about the need of special education for the gifted and advantages of this differentiated education to the learning capital increase, private schools started to offer special classes or schools to the gifted learners.

3. Turkish Education Foundation İnanc Türkeş Special High School (TEFITSHS): It is a unique high school founded in 1990 in order to provide special and differentiated education for gifted and talented high school students.

4. Science High Schools: The first science high school was founded in 1964 in Ankara. Those schools' main aim is to provide appropriate education for the ones who are talented in science and mathematics.

5. Science and Arts Centers (SACs): SACs are founded in 1993 by the General Directorate of Special Education Guidance and Counseling Services, and they constitute a special model designed for Turkey (Sak, 2010) [18].

6. Educational Programs for Talented Students (EPTS): EPTS is one of the most well-known research and theory-based STEM education programs for gifted students in Turkey and has become very influential in the field of gifted education.

7. Child Universities (CU): Currently, many universities in Turkey offer special after-school and summer programs for all students at their campuses. These programs have been called child universities. One of these programs is located at University of Istanbul and was founded in 2011, offering education to gifted and talented learners aged between 10-17 years (Kanlı & Özyaprak, 2015: 52-53) [10]. The identification of gifted children is preliminary executed and accomplished firstly by their teachers in their schools. Teachers present their findings as a report to the Turkish Ministry of Education. Then, these students are tested collectively by specialized teachers in computerized medium (MEB, 2006) [11]; cited in, Kalaycı & Aydınlı, 2019: 4) [9].

5. Diagnosis Process

These stages are described below.

5.1. Application Stage: In the first stage of the diagnostic process, it is announced that the gifted students will be taken for special training.

5.2. *Scan-Forwarding Stage:* In the screening stage, it is tried to determine the students who are more than a certain level by using the intelligence tests and the general ability tests.

5.3. *Measurement Stage:* Intelligence levels of the students who are gifted candidates are determined by using measurement tools (MEB, 2006) [11].

6. Intelligence Tests Used in Turkey

The developed test in other countries have adapted and utilized in our country Turkey also. However, due to much variations in cultures and norms along with countries, the validity and its measures of the tests can be regarded as low (Kalaycı & Aydınlı, 2019: 2) [9]. Various tests have been used in our country in the process of discovery of gifted and gifted students. Importance and adaptation of the intelligence

tests used cause problems in terms of the validity and reliability of the measurement results. As a result, the measurement of intelligence can be improved by practices, education, training and experience. The first intelligence scale was the Stanford-Binet Intelligence Scale which was adapted and applied in Turkey in 1915. Then, WISC-R intelligence test, which was published by Pearson in 1979, has been used in our country. Guidance Research Centers (RAM), Science and Art Centers (BILSEM) have widely used WISC-R.

6.1. Stanford-Binet Intelligence Test: In 1915, the Stanford-Binet Intelligence Scale was adapted to our country and the first intelligence test was started.

6.2. WISC-R Test: It has been widely used by RAM and BILSEM until 2016 after the Stanford-Binet Intelligence test in our country. It is a test consisting of verbal and performance sections applied to children between 16-16 years old.

6.3. Anadolu-Sak Intelligence Scale - Asis Intelligence Scale: In terms of being the first cultural and national test to be applied in our country, it differs from other imported intelligence tests. The test, which is applied to children between the ages of 4-12, evaluates intelligence and its components, attaches importance to individual assessment and scaling. The application time is between 25 and 45 minutes.

7. Characteristics of Giftedness/Talented Students

According to the Marland report, gifted children can show a high performance in any of the following: areas: general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, psychomotor ability. Having some significantly above abilities, being gifted, brings some characteristics together such as learning rapidly, reading intensively, knowing advanced vocabulary, being curious, wishing to work independently, having high academic achievement. These characteristics can be both strength and weakness in gifted people (Ohio Association for Gifted Children, 2018; cited in Yazıcı, 2019: 24) [25].

Renzulli (1986) [17] using his high imagination to exhibit original ideas of individuals who have demonstrated success as a result of his investigations on superior talent; or superior talent consists of the relationship between the three main

features of human property. These; Ability (general and special talent); Creativity and Motivation (Kalaycı & Aydınlı, 2019: 3) [9]. Gifted children show markedly rapid mental development. The accepted general view about the education of gifted people: First; «preparing a training program that differs in content from the normal course curricula»; second; «that specific learning needs should be identified and met». (Van Tassel-Baska & Stambaugh, 2005) [24]. As in many countries, being gifted in Turkey is considered within the scope of special education. However, this practice remained in the background (Özbay & Palanci, 2011) [13]. Because most of the gifted/intelligent students are not discovered, they cannot receive education in accordance with their own characteristics.

Conclusions. Accord ing to researches, one of the most important needs of the gifted students is to complete their emotional development in a healthy way. For this reason, determining the factors and the characteristics that affect them negatively is important for their development. The gifted students have recently become the one of focus subject of the educational literature. These studies in the literature, in summary, include the problems of education and social relations of the students with this definition in the most general sense. Studies in the field, which will contribute to the enrichment of the literature, are very important. The potential of intelligence with the developing world has been a matter of curiosity and intelligence capacity has been measured by using various methods. As a result of these measurements, a certain level of intelligence, people with intelligence above the average of general intelligence, highly intelligent or gifted individuals are named. Since talent is not only a concept related to giftedness, these individuals are defined as gifted . Signs of giftedness can be recognized by well-trained psychologists, preschool teachers and parents by observing developmental milestones. It is necessary for the teachers who work during the identification and training of these students to have a good education and clear and detailed consideration in this regard (Aytekin, Sarıca & Aytekin, 2014: 31) [2].

According to Fiedler, Lange & Winebrenner (2002) [6] gifted/talented students in separate schools from normal students, argues that they should be educated with

completely different education programs from them. Subsequently, intelligence quotient (IQ) testing was associated with giftedness. Across time and across the globe, the idea of high IQ as the sole determinant of giftedness has since been recognized as outdated and inadequate (Steiner & Carr, 2003) [21].

Modern approaches have expanded in the direction of giftedness as a developmental construct (Feldman, 2000 [5]; Subotnik, Olszewski-Kubilius & Worrell, 2011 [22]; Papadopulous, 2020 [14]).

Developmental approaches focus on precocious abilities or specific skills as the key components in the recognition of gifted children in the early years (Renzulli & Reis, 2009) [16]. Gifted individuals should be supported by coaches, mentors, school practitioners, their family, and all community bodies, and must utilize the opportunities provided in the expectation. According to the results of research conducted by Sak et al. (2015) [18], the most studied subjects in scientific studies about gifted people in Turkey are as follows: educational activities (19,1%), personality traits of gifted individuals (16,8%), guidance (15.4%), education programs for the gifted (14,1) and diagnostics (10,4). Less studied topics on this subject are as follows: gender (0,6%), Scientific studies in the field of giftedness (1,1%) and policies related to the education of gifted people (1,7%). According to the studies conducted by Tong & Yewchuk (1996) [23] show that gifted students are different than their peers on many subjects such as their perspectives, perceptions, learning speeds and emotional development. This situation causes the need of special approach in every areas of their lives. Therefore, gifted students have been involved in special education for many years. The results of the study conducted by Peterson, Duncan & Canady (2009) [15] found that gifted adolescents have higher level of anxiety than their peers in their study showed that academic and transition issues and college applications and decisions are the stressed out events for gifted students. Educating these individuals during their school years and helping them to reach their. It is very important to identify and educate gifted students in terms of the future a country. Consequently, gifted children's development will continue to be a topic for debate (Yazıcı, 2019) [25].

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