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# TÜRKİYE'DE ÖZEL YETENEKLİLER EĞİTİMİNDE EĞİTİM YÖNETİMİ VE DENETİMİ: BİR İHTİYAÇ VE GZFT ANALİZİ

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#### Özet

Bilim ve Sanat Merkezleri, tanılama sürecinde başarılı olmuş özel yetenekleri öğrencilere, mevcut potansiyellerini geliştirerek, bilimsel araştırma bilgisiyle, yenilikçi ve faydalı ürünler ortaya çıkarmalarına destek olan eğitim kurumlarıdır. Eğitim yönetimi ve denetimi uygulamaları, tüm eğitim kurumlarının gelişmesine ve ilerlemesine önemli katkılar sunmaktadır. Bu çalışmada, Türkiye'deki Bilim ve Sanat Merkezlerinin mevcut eğitim yönetimi ve denetim uygulamalarını incelemek için Güçlü yön, Zayıf yön, Fırsat ve Tehdit (GZFT) ve ihtiyaç analizi yapılmıştır. Araştırmanın verileri, 2018-2019 akademik yılında 235 öğretmen, müdür ve müdür yardımcısından açık uçlu sorulardan oluşan anket kullanılarak toplanmıştır. GZFT analizine göre sonuçlar şu şekildedir: Güçlü Yönler: Yönetici ve öğretmenlerin teknolojik becerileri; proje tabanlı eğitim; Zayıf Yönler: Açık hava aktivitelerinin olmaması; nitelikli yöneticilerin eksikliği; Fırsatlar: Bilim ve Sanat Merkezleri'nin yeniliklerin merkezi olması; Tehdit: Denetim kriterlerinin açıklığa kavuşturulmaması. En önemli ihtiyaçlar şunlardır: Teknolojik donanımların edinilmesi, yöneticilerin adaletli olması, denetim sürecinin hesap verebilirliği ve tarafsızlığı. Araştırma sonuçları temel alınarak bazı önerilerde bulunulmuştur.

Anahtar kelimeler: Eğitim yönetimi, eğitim denetimi, özel yetenekliler eğitimi, ihtiyaç analizi

# EDUCATIONAL MANAGEMENT AND SUPERVISION IN THE GIFTED EDUCATION IN TURKEY: THE NEEDS AND SWOT ANALYSIS

#### **Abstract**

Science and Arts Centers are organizations to create environment, and opportunities for identified gifted and talented students to develop talents, and to create innovative products with scientific research knowledge. Educational management and supervision practices present critical contributions to the successful development and positive outcomes of educational organizations. To explore the current educational management and supervision practices of the Science and Arts Centers in Turkey, Strength, Weakness, Opportunity, and Threat (SWOT) analysis, and the needs analysis were conducted. Responses to a written survey with openended items were collected from 235 teachers, principals, and assistant principals during the 2018-2019 academic year. SWOT results identified the following: Strengths: Technological skills of the managers, and teachers; project-based education; Weaknesses: Lack of outdoor activities; lack of qualified managers; Opportunities: The Science and Arts Centers are the center for

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innovations; Threat: Lack of clarification of supervision criteria. The most important needs are as follows: Acquiring the educational and technological equipment, fairness of the managers, accountability and objectivity of supervision process. Recommendations are made for addressing key concerns of the results.

Key words: Educational management, educational supervision, gifted education, needs analysis

#### **INTRODUCTION**

Science and Art Centers (SACs) were established in Turkey to enable gifted and talented individuals to get education, develop projects, and strengthen their scientific knowledge in the remaining time from the schools they attend. With the studies carried out in these centers, it is aimed that gifted individuals can carry out projects, develop their capacities, use them at the highest level, and to develop technical inventions and modern tools (Ministry of National Education [MoNE], 2007).

The SACs differ from other educational institutions due to their characteristics such as teacher and manager competences, and instructional programs. In this study, after presenting general information about educational management and supervision, the current situation will be revealed by examining the needs, problems, strengths, weaknesses, opportunities and threats specific to SACs. There's common agreement that educational management may be a series of activities for viably organizing assets and actions to realize instructional objectives (Bush, 2011). Through educational management, leaders manage human and physical resources to realize instructional objectives (Erdoğan, 2000; Özdemir, 2009). Giving extra detail, Choudhury (2001) has recommended that educational management processes particularly underpins the learning of values, demeanors, data, and abilities which encourage students' learning results. Educational management means making use of human power, capital, time, equipment and place effectively. Educational management takes into account of coordinating human and physical sources, deciding and directing group works (Okutan, 2012).

Educational management field directs the managers around educational needs and problem solutions. Whetten and Cameron (1995) defines the educational management as the theory and practice of organizations. According to Choudhury (2001), educational management is the process of understanding ethical values, attitudes, knowledge and skills to reach the organizational targets. Management is the phases of planning and keeping up an environment in which people work together to achieve the targets productively. Southworth (2004) clarifies that leaders impact learning through modelling, observing and dialogue. Bush (2008:277) refers to three key aspects of the definitions:

- The concept is about impact rather than authority. Leadership is independent of positional authority, however, management is closely linked to it.
- The process is purposeful. The person looking for the impact aims to realize certain purposes.
- •Influence may be practised by groups as well as individuals.

Educational management approaches require implementation of educational supervision. According to Igwe (2001), supervision means to guide, assist, direct, or to make certain that anticipated principles are met. Thus, supervision in a school suggests the methods of guaranteeing that standards, rules, regulations and strategies endorsed for implementing and accomplishing the targets of education are successfully carried out. Supervision therefore involves the use of expert knowledge and experiences to evaluate and coordinate the process of improving teaching and learning activities in schools.

Segun (2004) discusses that supervision is understood as the teachers' motivation for career growth, revision of instructional goals, educational equipments, teaching strategies, and the assessments of instruction (as cited in Bessong and Ojong, 2009). Similarly, Dodd (2008) defines supervision as a way of suggestions, guiding, encouraging, motivating, improving, and the supervisors expect the cooperation to achieve the goals (as cited in Bessong and Ojong, 2009). Contemporary educational supervision, as defined by Bailey (2006) is exemplified as a formal phases that search for the improvement in teaching and learning through guidance. Bailey (2006) defines educational supervision as a cooperation, because it welcomes various opinions that represent the interactions between the supervisor and the teacher, additionally to find out issues and prospective solutions.

Successful supervision is understood as a solution to the problem of progressing the quality and efficiency of education, and educational management. According to Shiundu and Omulando (1992), positive variables affecting quality of teachers have a role in improving qualification of instruction and curricula by checking undesired lack of attendance, and feedback. For achievement of organizational goals, appropriate supervision is certainly required. Supervision is one of the administrative instruments used as individually and group in the working environments (Nyarko, 2009).

Models of supervision can be classified into four by Bernard and Goodyear (2004). This classification includes; developmental model of supervision, integrated models of supervision, social role model of supervision, system model of supervision.

In this research, current practices and perspectives related to educational management and supervision will be discussed within the scope of gifted education in Turkey. The theoretical and empirical literature related to the value of exploring educational management and supervision practices is extensive (Ololube, 2013; Stukalina, 2013; De Grauve, 2005; Altun and Sarpkaya, 2017; Aydın, 2007). However, these concepts have not previously been applied

extensively to a study of gifted education in Turkey. In the literature review, it is seen that the studies on the SACs in Turkey in the field of education management for the gifted are limited, and insufficient in the field of educational supervision. It is foreseen that this study will contribute to the relevant literature, and it can be a roadmap related to the education management and supervision model in the gifted and talented education.

#### Gifted Education in Turkey

The SACs were founded in 1993 by the Ministry of National Education General Directorate of Special Education Guidance and Counselling Services. According to the 2018-2019 National Education Statistics, the number of teachers working in 160 SACs is 2,302 (MoNE, 2019). There are a total of 172 SACs in the 2019-2020 academic year. The number of teachers increased to 2,734 in the 2019-2020 academic year (as cited in Levent, 2020).

Ministry of National Education in Turkey defines giftedness as follows: A gifted individual is one who learns faster compared to the peers and leads in the capacity regarding creativity, art and leadership. S/he has a special academic talent, is able to understand abstract ideas, enjoys acting independently in the fields of interest, and has a high level performance (MoNE, 2019). In the SACs, supportive educational services are designed to meet the specific needs of gifted students. Special education programs are implemented for the objectives in line with the developmental features, educational needs of the individuals with a need for special education. Teachers need to have some of the following qualifications to be able to work at the SACs: To have earned master, or doctorate degree, to have published research, to participate in courses related to gifted education, to have project development skills, and to have passed the interview exam.

In Turkey, there are similarities in the selection process of school principals within the general education and gifted education. The prerequisite for being a manager at the SACs is to be successful in teacher selection exams. The reason for the requirement of being a teacher exam as a prerequisite for being a manager at the SACs is the administrative convenience of knowing the structure and functioning of these centers, the education system and the characteristics of gifted children. It is important to have trainings about new approaches in the gifted education, enriched education programs, seminars, inservice trainings such as project preparation and implementation. In-service training positively affects the performance of teachers and the success of students (Jacob and Lefgren, 2004).

In related literature, it has been seen that the problems of SACs increase in many subjects from its directive, curriculum, physical space, materials, student, and teacher selection to management policy (Sarı and Öğülmüş, 2014). The first step to eliminate these problems is to perform a SWOT analysis together with the needs analysis. This may bring along an effective strategic planning, both in the selection and training of qualified human resources -teachers and administrators- and in meeting the needs in the structuring of a successful education. This determination is the starting point of the research.

In this article, educational management and supervision systems of the SACs are examined based on the opinions of the teachers and managers working at these centers. These findings help interpreting the results of the current SWOT and needs analysis of the SACs serving gifted students in Turkey.

#### **METHOD**

This research is designed within the framework of qualitative research methods and techniques. Creswell (1998) expresses qualitative research as a process of meaning by questioning social life and human-related problems with its own methods. In the qualitative research process, the researcher presents a holistic approach, uses word analysis, detailed participatory interview reports, and organizes research in a natural setting. In qualitative research, generally followed process is piece by piece [induction]. The researcher continues the process by explaining concepts, meanings and relationships based on observation, interviews and documents (Merriam, 1998).

This research was carried out in three phases. In the first phase the survey was developed after literature review. In the second phase the needs analysis was conducted, and in the third phase the SWOT analysis was conducted at the SACs.

Witkin and Altschuld (1995) defines a needs analysis as taking decisions related to the programs and constitute principles, or systematic methods for organizational development. Defining the needs is a first step towards preparing, and following plans for solving problems. Needs analysis can be short and long term, and they support the development of individuals or organizations so that they are able to detect needs and suitable solutions (Karadağlı and Bozkurt, 2012). This study is consisted of needs analysis and SWOT analysis, of which have both qualitative characteristics. Qualitative research has the characteristics of interpretive and naturalistic approach. The

researchers interpret the data in their naturalistic settings (Denzin and Lincoln, 2005).

#### Research Design

The data collection survey used in the research consists of two parts. First, there are demographic questions about age, professional seniority and gender of the participants. At the second part, there are four open ended questions. The questions are about the educational management, supervision processes, the problems and needs encountered, the strengths, weaknesses, opportunities and threats of the SACs. To ensure the survey questions were clear and understandable, 10 teachers and managers completed it during a pilot phase. Questions and the intelligibility of the questions were examined. The pilot application shows that the participants did not have difficulty in understanding the questions and answered easily. So, the question form was administered without any change.

#### Research Sample

In the process of collecting the data, the sample was selected according to the homogeneous sampling principle of purposive sampling methods. Purposive sampling allows in-depth study of situations thought to be rich in information. In this sense, purposive sampling methods are useful in many cases, in discovering and explaining facts and events (Patton, 1987). Homogeneous sampling method means that the sample is composed of a similar subgroups (Büyüköztürk, 2012). The questionnaire used in the survey was sent to all SACs in Turkey. Population consisted of 160 SACs and 2302 teachers and managers (MoNE, 2019). The number of teachers and managers participated in the study was 235. The research participants, the teachers, managers and assistant managers working at the SACs in 2018-2019 academic year are demonstrated in Table 1.

Table 1 The participants' profile

<b>Participants</b>	N	%
Gender		
Male	126	53,6
Female	109	46,4
Age		
21-25	4	1,8
26-30	28	11,9
31-35	47	20
36-40	67	28,5
41+	89	37,8
Professional seniority (years)		
1-5	23	11,1

0		
6-10	38	14,9
11-15	62	26,4
16-20	50	21,2
21+	62	26,4
Duty		
Teacher	187	79,5
Manager	29	12,4
Vice-principal	1	0,4
Assist. Manager	18	7,7
Total	235	100

As seen in Table 1, 187 teachers, 29 managers, 18 assistant managers and one vice principal participated in the study; the total number of participants was 235. Four of the participants are in the 21-25 age range, 28 are in the 26-30 age range. 47 are in the 31-35 age range, 67 are in the 36-40 age range, and 89 are in the 41 and over age range. When the seniority of the participants is examined, it is seen that 23 participants have 1-5 seniority years, 38 of them have 6-10, 62 of them have 11-15 seniority years, 50 of them have 16-20 and 62 of them have 21 or more seniority. 109 of the participants are female and 126 are male.

#### **Research Instruments and Procedures**

In order to ensure the internal validity of the research, the results of the research were shown to the participants, and they confirmed. It is called member checking to ask the participants whether the findings of the study accurately reflect their own thoughts. This strategy requires asking for feedback on the findings (Houser, 2015). Asking people who have general knowledge about the research subject and specialize in qualitative research methods to examine in various dimensions is another reliability measure. This method is called peer reviews (Creswell, 2003). Inclusion of more than one researcher, clearly revealing the research process, keeping raw data, confirming the research data meet the reliability criteria of the qualitative research (Yıldırım and Şimşek, 2008). Marvasti (2004) interpreted reliability as the results obtained from a research by different researchers. Mayring (2000) defined reliability as the accuracy of the measurement, and approach.

The research instrument includes the questions stated below:

- 1) What are the problems of educational management in your organization?
  - a) The problems encountered in instructional program:
  - b) The problem encountered in student service management:
  - c) The problems encountered personnel service management:
  - d) The problems encountered in general service management (physical conditions, heating, lightening, repair etc.):
  - e) The problems encountered educational finance:

- 2) What are your expectations in the scope of educational management and supervision?
- 3) How is supervision implemented at your organization?
- 4) What are strong, weak sides and opportunities, threats (SWOT) of your organization?

## **Data Analysis**

In the analyzing process, content analysis technique is used. Content analysis, which is a set of methodological tools and techniques can be regarded as a controlled interpretation effort and a means of reading which is usually based on deduction (Bilgin, 2003). After examining the views of the participants, similar statements were brought together. Thus, similar contents were combined and coded.

#### **FINDINGS**

According to the research findings, there are instructional material, physical condition, teacher quality, outdoor activities, and unfair implementation problems in educational management. The participants expect for improvement in supervision, objectivity, transparency. There are different methods and parties for supervision, lack of certainty and accountability of supervision. Additionally, there is need for standardized supervision tools and adequate supervision feedback. One of the strong sides of the SACs is supportive environment for teachers' academic development. The weak side is insufficient number of teachers. The opportunity is professional satisfaction, and the threat is parents' over expectations.

Table 2: Participant opinions on the problems of educational management

Themes	Category	Code	$f^{-}$
		Inappropriate physical conditions	17
		Lack of material	12
	Intro organizational factors	Lack of budget	10
	Intra-organizational factors	Lack of motivation	7
		Not flexibility of legislation	6
		Lack of outschool learning	
Educational programs		Insufficient teachers	13
Educational programs	Problems arising from the	Insufficient managers	11
	parties	Lack of coordination of	
		stakeholders	9
		The curriculum does not meet the	12
	Variables of the course	requirements	12
	variables of the course	Insufficient time	8
		Inability to adapt to change	5

	Other	No problem		
Student services		Parents' expectations		
	Parent oriented problems	Parents' indifference	13	
		Parents' pressure	12	
		Over crowded classrooms	9	
	Student oriented problems	Students indiscipline	8	
	•	Student's over self-confidence	5	
		Lack of equipments		
		Communication problem	14	
		Lack of budget		
	Intra-organizational reasons	Technological inefficieny		
	O	Lack of counselling services	9 8	
		Lack of the number of managers	6	
		Teacher quality	2	
		No problem	33	
		•		
	Other	No idea	2	
		The regulation does not meet the		
		requirements The manager does not distribute		
	Problems caused by managers	equal tasks	12	
		Lack of coordination	7	
		Uncertainty of task definition	6	
		-		
		Discrimination (unfair approaches towards teachers)	5	
Personnel services		Lack of education	14	
		Lack of cooperation		
		Lack of cooperation  Lack of communication	13	
	Problems caused by personnel		12	
		Unaware of their duties and		
		responsibilities		
		Lack of motivation		
	Other	No problem		
		No idea	3	
		Inadequate classes	23	
		Lack of game and activity area	9	
	Physical capacity	Inadequate workshops		
	1 Hybreat capacity	No canteen	4	
		Inadequate old buildings	4	
		madequate old bullatings		
		Inadequate number of classrooms	1	
General services	Technological problems		15	
General services	Technological problems	Inadequate number of classrooms		
General services	Technological problems	Inadequate number of classrooms Lack of technological equipment	15	
General services	Technological problems	Inadequate number of classrooms Lack of technological equipment Inadequate internet connection	15 4	
General services		Inadequate number of classrooms Lack of technological equipment Inadequate internet connection Authority limitation	15 4 28	
General services	Technological problems  Financial problems	Inadequate number of classrooms Lack of technological equipment Inadequate internet connection Authority limitation Priority of expenditures	15 4 28 24	
General services		Inadequate number of classrooms Lack of technological equipment Inadequate internet connection Authority limitation Priority of expenditures Lack of instructional equipments	15 4 28 24 18	

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	Lack of accountability	8
	Insufficient heating	6
	Need for technicians	5
Oil	No problem	73
Other	No idea	10

Table 2 shows the participants' opinions about educational management problems. Within the educational programs, the participants identified concerns including a lack of instructional materials and inappropriate physical conditions. The classrooms do not have sufficient materials for challenging activities and there is not enough technological equipment to extend, and differentiate the activities. The curriculum is not sufficient to meet the demands and needs of the gifted students. Additionally, in conflict with regulations, there exist overcrowded classrooms which can reduce the effectiveness of the instruction. The qualifications of teachers and managers are not seen as adequate to meet the needs of the gifted students. The managers' unfair behaviours and teachers' lack of cooperation, communication and motivation decrease the effectiveness of the educational management.

The managers and teachers at the SACs are having difficulty in presenting outdoor activities because of insufficient physical capacity of education buildings. Financial problems are caused by inefficient financial management skills of the managers. They don't distribute the budget balancedly, and this discomforts the teachers. Some statements of the participants are as follows: "Incorrect identification of priority needs while deciding the expenditures" "Lack of sufficient knowledge of financial management. They need trainings on this issue."

It may be inferred from the participants' quotations that there is a perception of unfairness at the SACs. Teachers expect the managers at the SACs to be objective and fair. The participants explained that they would like to work in a positive working environment. The findings prove that there exist mobbing/bullying in some of the SACs. The participants explained lack of merit in manager selection process. The SACs need to be improved physically, and instructional materials should be increased in number. The participants described their willingness to participate in conferences and seminars, but there are barriers for attendance.

Participants indicated that improvements are needed in the performance evaluation system. The teachers and managers are in need of guidance, process based and internal supervision. According to the participants, there aren't any objective criteria, accountability, and standardized tools in supervision.

Additionally, they felt that the feedback and supervision based appraisal system will improve the supervision at the SACs. Some of the statements are as follows:

"I think it is a non-objective assessment based on the relationship between teachers and the managers."

"Biased assessment, it differs in the assessment of teachers who are close to the managers (e.g. friendship)."

"The importance of attending to seminars and conferences."

Table 3. Participant expectations on educational management and supervision

Theme	Category	Code	f
		Acting fairly	18
		Coordination	12
		Transparent management	9
		Merit selection of managers	9
		Joint decision	8
	Managamantand	Provision of positive working	0
	Management and	environment	8
	Managers	Fast bureaucratic process	5
		Openness to development and	(
		innovation	6
		Not applying mobbing	4
Educational		Creating a performance evaluation	4
Management		system	4
		Improvement of physical conditions	19
	Development	Provision of course materials	
		Development Material and moral support to project work	
		School climate	Openness to communication
	Trust teachers		11
	Teamwork		
	Other	No expectation	
	Other	No idea	
		Strong internal supervision	9
	Cum americi are farmer - 1	Process-based supervision	8
	Supervision format	Improvement in performance system	6
		Guidance-based supervision	6
		Supervision criteria should be	1.0
Educational		determined	13
Supervision		Managements' receiving supervision	
_	Obj. C. C.	training	8
	Objectivity	Standard supervision tools	6
		development	
		Transparent supervision	6
		Objectivity	5

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	Perchological	Fair	14
	Psychological characteristics	Reliable	12
	Characteristics	Motivating	5
		Feedback after supervision	11
_	Outputs	There must be a supervision based on	9
		appraisal system	<i></i>
		There should be a supervision	5
	Other	Existing supervision is sufficient	3
	Other	No expectations	42
		No idea	5

As seen at Table 3, the participants expected the management and managers to be transparent and fair. They explained that the managers should provide positive working environment and be open to innovations. The participants expected joint decisions. Some of the participants declared the existence of mobbing at their centers.

For the educational supervision, the participants are in expectance of improvement. They need guidance and process based supervision. Participants emphasized the objectivity and transparency of supervision and there should be a standardized supervision tools with criteria.

The participants explained their expectance of being supported of participating in the conferences. There are some participants who don't expect anything from the management or supervision.

Table 4. Participant opinions on the supervision at the SACs

Theme	Category Code		$\overline{f}$
		By school managers	25
	Cumanzidian	By supervisors	18
	Supervision	By directorate of National Education	15
		By councils	4
		Monitoring students success	19
		Feedbacks from parents	15
Supervision means and methods	Operation of supervision	Meetings	15
	process	Teachers' self-evaluations	11
		Observations	9
		Trust of parties	9
		Classroom notebooks	4
		No idea	8
	Other	No supervision	4
	Other	Secret	1
		Parents' supervision	1
		Supervision of managers	19
Cupartician process	Process uncertainty in	Lack of criteria	15
Supervision process	supervision	Lack of supervision time in the process	
		Lack of multilateral supervision	

30 3				
		Communication problem	16	
	Obstacles	Lack of knowledge of the supervisor	13	
	Obstacles	Lack of guidance by inspectors	5	
		Uncertainty of the curriculum	4	
		Not objective	15	
	Accountability	Non-use of standard supervision tools		
		Inadequate supervision feedback		
		No transparency	9	
		Ineffectiveness of supervision feedback	7	
	Other	No problem		
	Other	No idea	2	

As seen in Table 4, there are variety of supervising parties at the SACs. The participants explained that supervisors at the MoNE, managers at the SACs, Directorates of National Education, and councils that are responsible of supervision. This situation brings uncertainty. When taken into consideration that each party will have different supervision criteria, this will create distrust. The lack of standards, objectivity and uncertain supervision tools and feedback will bring ineffectiveness of the supervision process. The participants explained that there should be multilateral supervision, and they think lack of communication is a big obstacle in supervision. Some of the participants' statements are as follows:

Table 5. Participant opinions on SWOT Analysis of The SACs

Strengths	f	Weaknesses	f	Opportunities	f	Threats	f
Supporting development	83	Physical capacity	42	School climate	62	Insecurity	15
Teamwork	45	Lack of guidance for teachers	34	Professional satisfaction	45	Student absenteeism	14
Appreciation	41	Working hours	20	National and international projects	27	Teacher performance evaluation	11
Project oriented	37	Lack of expertise in counselling	18	Openness to innovation	22	Insufficient number of teachers	9
Solution oriented management	25	Uncertainty of guidance service	15	Selected students	16	Parents' over expectations	8
Open to new ideas	25	Lack of equipment	14	Selected teachers	14	Transportation	9
Teacher qualifications	12	Insufficient number of projects	9	Positive parents	14	Insufficient budget	7
Student-centered instruction	11	Parental indifference	9	Central location	6	Incompetency of managers	7

<sup>&</sup>quot;Determination of standard tools for process evaluation"

<sup>&</sup>quot;Clarification of supervision criteria."

<sup>&</sup>quot;There is usually democratic supervision in my organization."

Teacher motivation	9	Insufficient number of teachers	9	Technology skills	6	Nonspecific legislation	n 6
Coordination	Q	Lack of targets	1	Relations with	1	Overconfidence of	6
among teachers	O	Lack of targets	4	universities	4	students	O

Table 5 demonstrates the strengths, weaknesses, opportunities and threats at the SACs. Teacher qualifications are evaluated as strong side of the SACs. Some of the participants explain that the SACs have solution-oriented management. The participants emphasize the SACs are the centers of new ideas and innovation. Teachers' motivation is high and professional development is supported. Student-centered instruction provides effectively identification of students' abilities.

When examined the weakness of the SACs, it is understood that there is lack of equipment and physical capacity at the SACs. The working hours, which the participants described as weakness, are related to the time of arrival of the students. The students attend the SACs after their school end, or before their school starts. The collaboration with the universities and academics creates a big opportunity. There are some signed protocols between the Head of Gifted Department at MoNE and universities. Technology skills of the managers and teachers at the SACs are high and this is a big opportunity for developing innovative projects, using technology integrated instructions. Over confidence of the students and over expectations of the parents negatively effect the teachers. The insecurity of the centers include gardens, and school districts. This threat is because of the inefficiency of physical conditions of the SACs.

Some participants' statements are as follows:

<sup>&</sup>quot;Poorly qualified managers."

<sup>&</sup>quot;Our organization has many physical deficiencies. Our building and classrooms are insufficient."

<sup>&</sup>quot;The human resources and student potential are high and the parent profile is generally qualified."

<sup>&</sup>quot;Teachers are open to learning."

<sup>&</sup>quot;We have learned by experiencing, there is no guidance."

<sup>&</sup>quot;Failure to consider factors such as equity and merit in appointments distorts the intra-organizational peace."

#### DISCUSSION and CONCLUSION

When the problems of the educational management asked to the teachers and managers of the SACs, they mentioned about inappropriate physical conditions, lack of materials and budget. According to MoNE Internal Monitoring Unit report (2011) entitled "Science and Art Centers Process-Education of Gifted Individuals", 999 per thousand of the budget allocated to special education in 2009 was transferred to lower intelligence groups, while only 1 part was transferred to higher intelligence groups (as cited in Levent, 2020). In this context, more budget should be allocated to SACs from the budget allocated for special education. The participants described the insufficiency of some managers and teachers. In studies (Sak et al., 2015; Satmaz and Evin Gencel, 2016), the low quality of teacher competencies in the education of gifted students is stated as one of the important problems. The capabilities of the managers are crucial for the effectivess. Objective criteria should be included in the appointment of managers and assistant managers who will work at SACs. Legal regulations should be introduced to ensure that the stages applied in the selection of teachers are also valid in the selection of managers (Levent, 2020). Insufficient managerial competences can cause big problems. School managers are leaders as well as implementers of educational policies. They are expected to have certain managerial skills that will enable them to plan, organize, supervise and manage schools effectively to reach educational goals and objectives. These skills are needed to perform job functions (Akpan and Etor, 2015). The research results showed that the instructional programs don't meet the needs. Normal education environments are not sufficient because it has a limiting effect on the potential of gifted students. Therefore, gifted students need to be supported with different educational programs that develop their own potential (Subotnik, Worrell and Olszewski-Kubilius, 2016). Some of the participants described that there isn't a problem about educational management.

The participants stated that parents' expectations and indifference create problems in management of student services. Another finding showed that the SACs still have insufficient technological equipments. The lack of educational and technological equipments also create problems in student services. Currently, some of the SACs are located on the lower or upper floor of a school. Financial resources should be increased for the solution of building, equipment and budget problems in SACs and for improving the physical capacity (Levent, 2020). However, in Eker's (2019) study, it is stated that SACs have more enriched learning environments, there are classes such as laboratories, intelligence games, technology and robotic coding.

Another research result showed that there is communication problem. When asked about the management of personnel services, it has been understood that the regulation doesn't meet the requirements. There are unfair managers and lack of coordination. The personnels' having insufficient education is the other problem of personnel service management. According to the results of the research, there is a lack of accountability of budgets at the SACs. The managers' priorities while managing the finance are thought to be wrong.

The participants explained that the supervision is carried out by the supervisors, the school managers, and the directorate of national education, and by the councils. Supervisory skill is concerned with the ability and competence of an educational manager to effectively carry out the supervision of instruction, programmes and activities in the school system. Most school managers are deficient in a range of supervisory competencies and this results in ineffective supervision, poor quality of instructional delivery and low standard of education (Akpan, 2001).

Supervisors with the important duty to enforce educational policies and to ensure that these policies and practices comply with government-approved policies and regulations (Appiah, 2009). Sergiovanni and Starratt (2002) conclude that instructional supervision ultimately enhances the operation of the classroom and leads to student success through tecahers' professional development (BaffourAwuah, 2011). When the participants were asked how the supervision is conducted, they explained that by monitoring the student success, teachers' self evaluations, and meetings. There are problems in supervision process like uncertainty in supervision, lack of knowledge of supervisors about the SACs, there is no accountability and transparency. Some of the participants believed that supervision is not objective and fair.

The research found out that the supervision process is lack of evaluation criteria and standard assessment tools. The supervisors are lack of expertise in evaluation in gifted education. The supervision process is lack of feedback and reinforcement. For educational organizations there should be a system for continuous evaluation to achieve the objectives (Esia-Donkoh and Ofosu-Dwamena, 2014). According to the results of the study, there is a counselling problem. There exists non-holistic guidance services. There is uncertainty, and lack of expertise in guidance. Some of the gifted students may experience sociological and psychological problems. At the SACs, specialist psychologists should be employed -besides the guidance teachers- to provide psychological

counseling services to students with this characteristic and their families (Levent, 2020).

The research result showed that there is supportive environment for academic development at the SACs, the centers are open to new ideas, and project oriented. Most of the managers are solution oriented. Some of the participants explained that the distribution of the tasks should be focused on the expertise. The teamworks are supported. On the other hand, some of the participants explained that there is nothing praiseworthy at the SACs.

The results showed that the strengths of the SACs are teachers' coordination, technology skills, and motivation. There is successful solution-based management and defined vision and mission statements at the SACs. There is teamwork and project based working. According to the results of the research, the weaknesses are as follows: Lack of space for social activity, detached buildings, equipments, expertise of teachers, unfair managers.

The research revealed the threats of the SACs. These are as follows: Student rotation, parents' over expectations, students' absenteeism, and overconfidence. The fact that the learner is at the center and the flexibility in the programs also lead to different expectations for the SACs by students and parents (Demir and Demir, 2020). The insecurity of school gardens, transportation and inadequate guidance services are the other threats. This research showed that the SACs are lack of targets. According to Thomas and Martin (1996), managing the education system means setting realistic targets and preparing plans for the achievement of these goals. Those plans involve creating distinct phase, setting objectives, allocating resources, delivering results, evaluating the impacts and resetting the objectives in the light of evaluation.

The opportunities of the SACs are the selected teachers and students, teamwork, developing national and international projects, and central location. The participants' expectations of educational management are transparency, accountability, justice, coordination, not applying mobbing, improvement of physical conditions and supporting conference and seminar participation. The participants' expectations of educational supervision of the SACs are as follows: Improved performance evaluation system, guidance based supervision, process based supervision, strong internal supervision. According to the participants there should be standard tools, transparency and fairness in educational supervision at the SACs. This study which sets out a detailed framework for the current situations and profile of the SACs is expected to lead the other researches. According to the results of this research, some suggestions can be presented as follows:- When it is taken into consideration that the participants

are the teachers and managers of the SACs, their needs and expectations showed that they are in need of an effective educational management and supervision model for the gifted education in Turkey.

- The formal regulations including improvement of the performance evaluation, finance, counselling service, qualifications of teachers and managers can be developed.
- The fairness of the managers and organizational justice may be supervised periodically by the supervisors. That may be thought to bring motivation, labor peace, and trust among the teachers at the SACs.
- The standardized evaluation tools may be developed at the supervision process which will contribute to the organizational climate at the SACs.

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# GENİŞLETİLMİŞ ÖZET

Etkili bir eğitim sürecinde, insan kaynaklarının nitelikleri, önemli faktörlerden sadece biri olmasına karşın, bütünsel olarak tüm kurumun yapı ve işleyişini etkiler. Eğitim yönetimi, insan gücü ve kaynağı yönlendirmede önemli bir yere sahiptir ve birçok alanın temeline dayanan disiplinlerarası bir alandır (Aslanargun, 2007). Türkiye'de örgütsel yaklaşımın önem kazanması, eğitim kurumlarının öneminin artması ve kazandığı niteliğin örgütsel bağlamda olması sonucu, yeterliliği sağlanmış personel istihdamı gereği ortaya çıkmıştır. Bu bağlamda eğitim kurumlarının yönetimi ve denetimi konusu da önem kazanmıştır (Buluç, 1997). Eğitim, toplumsal sistemin hem devamını, hem de yeniden üretimini sağlama işlevi ile değer yaratan bir süreçtir (Yılmaz, 2015). Eğitim insana yönelik ve insan tarafından gerçekleştirilen bir süreçtir. Toplumdaki her birey, hayatının bir döneminde hem eğiten hem eğitilen konumundadır (Şişman, 2015).

Eğitim denetimi, eğitim öğretim faaliyetlerinin, başlangıçta belirlenen hedeflere ulaşmada hangi noktada olduğunun belirlenebilmesi için gerekli olan etkinlikler bütünüdür. Mohanty (2008) eğitimde denetimin akademik ve idari olmak üzere iki işlevi olduğunu dile getirir. İdari (administrative) bağlamda denetim öğretmenlere sağlanan fiziksel alt yapı, okul emniyeti ve güvenliği, okul kayıtları, okul hesapları ile okuldaki iş yükünün uygun dağıtılıp dağıtılmadığının kontrolü ile ilişkilidir. Akademik bağlamda denetim ise, öğretim izlenmesi, öğretmenlere öğretimin niteliğini geliştirme, öğrenci başarısını ölçme ve değerlendirme için rehberlik edilmesini kapsar. Böylece akademik denetim, denetimin öğretimsel boyutu ile ön plana çıkmakta (Memduhoğlu ve Zengin, 2012), öğretmene teknik asistanlık, öğretimi hazırlanmada yardımcı olma, güncel kalma, mesleki demokratik liderlik sağlamakta, daha kısa bir ifade ile öğretmenlerin mesleki gelişimlerine katkı sağlamaktadır (Tomal ve diğerleri, 2015). Eğitim öğretimin niteliğini artırma görevi yüklenen günümüz denetiminin artık sadece dışarıdan değerlendirme ile değil, ayrıca okulun ve okul üyelerinin birbirlerini ve kendi kendilerini değerlendirmesi yolu ile de geliştirilmesi gerektiği belirtilmektedir (McNicol, 2004, s. 288).

Özel yetenekliler eğitimi, Milli Eğitim Bakanlığı Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü tarafından kurulmuş olan Bilim ve Sanat Merkezleri'nde sürdürülmektedir. Öğretmen ve yönetici seçimi, eğitimi ve yetiştirilmesi, öğretim programları, yönerge, proje odaklı eğitim vb. hususlarda genel eğitimden farklı yönleri bulunmaktadır. Bilim ve Sanat Merkezleri'ndeki

yapı ve işleyişteki farklılıklar, yönergede belirtilen uygulamalar, mevcut eğitim yönetimi ve denetiminde önemli değişiklikleri beraberinde getirebilir.

Bu araştırma ile Bilim ve Sanat Merkezleri'ndeki eğitim yönetimi ve denetimi ile ilgili mevcut yapı ve işleyişteki ihtiyaçların, güçlü, zayıf yönlerin belirlenmesi, tehdit ve fırsatların tespit edilmesi amaçlanmaktadır. Bu amaç doğrultusunda Türkiye'nin tüm bölgelerindeki Bilim ve Sanat Merkezlerinde görev yapan öğretmen ve yöneticilere yarı yapılandırılmış görüşme formları ulaştırılmıştır. Araştırma 235 katılımcı ile yürütülmüştür.

Araştırma nitel araştırma yöntemi çerçevesinde desenlenmiştir. Araştırmada kullanılan veri toplama anketi iki bölümden oluşmaktadır. İlk bölümde, katılımcıların yaşı, mesleki kıdemi ve cinsiyeti ile ilgili demografik sorular bulunmaktadır. İkinci bölümde dört soru bulunmaktadır. Sorular, Bilim ve Sanat Merkezlerinin eğitim yönetimi, denetim süreçleri, karşılaşılan sorun ve ihtiyaçlar, güçlü ve zayıf yönleri, fırsatları ve tehditleri hakkındadır.

Verilerin toplanması sürecinde örneklem, amaçlı örnekleme yöntemlerinden benzer örnekleme ilkesine göre seçilmiştir. Amaçlı örnekleme, bilgi açısından zengin olduğu düşünülen durumların derinlemesine incelenmesini sağlar. Analiz sürecinde içerik analizi tekniği kullanılmaktadır. Çeşitli söylemlere uygulanan bir dizi metodolojik araç ve teknik olan içerik analizi, kontrollü bir yorumlama çabası ve genellikle tümdengelime dayalı bir okuma aracı olarak kabul edilebilir (Bilgin, 2003).

Araştırma sonuçlarına göre, eğitim yönetiminde öğretim materyalleri, fiziki koşullar, öğretmen kalitesi, açık hava etkinlikleri, tarafsızlık ve hakkaniyet konularında problemler bulunmaktadır. Bazı yöneticilerin, öğretmenler arasında ve uygulamalarda haksızlıklar yaptıkları tespit edilmiştir. Katılımcılar denetim, nesnellik, şeffaflık ve standartlaştırılmış araçlarda geliştirilmesini beklemektedir. Ek olarak, standartlaştırılmış denetim araçlarına ve yeterli denetim geri bildirimine ihtiyaç vardır. Bilim ve Sanat Merkezlerinin güçlü yönlerinden biri, öğretmenlerin akademik gelişimi için destekleyici ortamının olmasıdır. Zayıf yönü, yöneticilerin adaletsizliği, öğretmen sayısının yetersiz olmasıdır. Fırsat, mesleki memnuniyettir ve tehdit, ebeveynlerin aşırı beklentilerinin olmasıdır.

Araştırmada, öğrenci hizmetlerinin yönetiminde yaşanan sorunların veli beklentileri ve ilgisizliği olduğu görülmektedir. Eğitim amaçlı ve teknolojik donanım eksikliği öğrenci hizmetlerinde sorunlar yaratmaktadır. İletişim sorunu da mevcuttur. Personel hizmetlerinin yönetimi konusunda

yönetmeliğin, gereklilikleri karşılamadığı anlaşılmıştır. Denetim sürecinde belirsizlik, denetçilerin Bilim ve Sanat Merkezleri hakkında bilgi eksikliği gibi sorunların mevcut olduğu, hesap verebilirlik ve şeffaflık olmadığı sonuçlarına ulaşılmıştır. Araştırmaya sonuçlarına göre, denetim, tarafsız ve adil değildir. Araştırma sonucunda, Bilim ve Sanat Merkezlerinin akademik gelişimi destekleyici ortamı, yeni fikirlere açık, proje odaklı olduğu tespit edilmiştir. Yöneticilerin çoğu çözüm odaklıdır. Araştırmada, ekip calısmaları desteklenmektedir. Merkezlerin güçlü taraflarının öğretmen koordinasyonu, teknoloji becerileri ve motivasyonları olduğu tespit edilmiştir. Yönetimin, çözüm odaklı olduğu görülmektedir. Araştırma sonuçlarına dayanarak aşağıdaki önerilerde bulunulmuştur:

- Performans değerlendirme, danışmanlık hizmetleri, öğretmen ve yönetici nitelikleri geliştirilebilir.
- Yöneticilerin adaletli olması ve örgütsel adalet, denetmenler tarafından danışmanlık yolu ile sağlanabilir.