



Research Article

Effectiveness of Teacher Education Program Developed For Teachers of Gifted Students¹

Nisa Gökden KAYA², Ayşegül ATAMAN³

Received: 17 September 2017 **Accepted:** 12 December 2017

Abstract

In this study, in order to prevent unwanted behaviors of gifted students at a secondary school, a 30 hours education program based on Glasser's choice theory was developed according to Taba model and implemented to subject teachers. During the development of program, in-service training needs of teachers were determined based on interviews with school administrators, counselors, teachers and classroom observations. The training program prepared in line with these needs was implemented by the researcher for ten weeks, to a group consisting of ten teachers. The program includes the ways how students' needs of belonging, power, fun and freedom can be met according to Glasser's choice theory in the school environment, activities in order to develop success identity, internal motivation and responsibility awareness in gifted students. The effectiveness of the education was evaluated by the frequency survey of the behaviors of the students applied to the teachers, teacher interviews and classroom observations. Results showed that education given to the teachers was effective in reducing unwanted behaviors of students and increased the scores of teachers' in the field of quality teacher-student interaction, creating student centered learning environment, creating quality school environment and preventive behavior management.

Keywords

gifted Students, teachers, choice theory, unwanted behaviors, student centered classroom management

To cite this article:

Kaya, N. G., & Ataman, A. (2017). Effectiveness of teacher education program developed for teachers of gifted students. *Journal for the Education of Gifted Young Scientists*, 5(4), 1-30. DOI: <http://dx.doi.org/10.17478/JEGYS.2017.67>

¹This study was produced first authors doctoral thesis

²Dr., Counselor, Nasreddin Hoca Primary School, Etimesgut – Ankara, e-mail: nisakay@gmail.com

³Prof. Dr., The European University of Lefke, Department of Special Education, e-mail: ayataman@gmail.com

Introduction

Gifted individuals, who constitute an important group among students who need special education, have different requirements. But it is also true that there are some problems in special education even in accepting the needs of gifted students. According to Ataman (2005) the underlying reason of these problems are some prejudices, such as there is no need for extra training in superior talents, because they can be trained in every setting or extra education will develop a class of elites that causes major problems in the society.

Gifted students face a number of challenges in the field of education, although they play an important role in the development of societies. Gifted students are the most neglected group of children with special needs. Educational programs designed for students with normal development do not address gifted students and educational programs specific to gifted students do not apply to formal public schools. If gifted people cannot receive education appropriate to their needs, they can experience the negativities created by those who cannot realize themselves. For this reason, it is very important to support the development of the gifted with the appropriate education program (Kaya, 2013).

A suitable school and classroom arrangement is necessary for the training activities to achieve their goals and to achieve the desired efficiency. However, in all types of educational institutions, unwanted behaviors are faced besides the targeted behaviors. The expectation of a classroom and school environment in which unwanted behaviors and other disciplinary problems are never experienced is unrealistic. As traffic accidents cannot be completely prevented even in the best managed systems, it is not possible to completely eliminate the disciplinary problems that are experienced in schools (Yüksel and Ergün, 2005).

It is possible that unwanted behaviors may also be seen in schools where gifted students are educated (İnci, 2014; Sezer, 2015). Furthermore, when the fact that properties as perfectionism and leadership are particularly prevalent in gifted students taken in consideration, unwanted behaviors can sometimes be observed in a classroom environment of gifted students. One of the most common features of gifted students is perfectionism, causes avoidance of mistakes, and perfection of the work being done, so that if perfectionism is very intense, it may be a matter of mistake to refuse to do the job or task to do. Leadership, which is another feature of gifted students, can be seen as always trying to be favorite, directing the group and setting the group rules. Tannenbaum (2003) stated that gifted students usually show behaviors in the classroom environment like insisting on having difficult and unscheduled tasks, rejecting borders, desiring independence and being out of order. In addition, severe competition for high grades among gifted students and anxiety about reaching very high academic expectations of teachers and their families can affect students' academic self-concepts negatively, causing lack of self-confidence in participation in the lesson, stressfulness and closure. This can lead to unwanted behaviors, sometimes referred to as "big fish little pond effect" (Zeidner and Schleyer, 1999), which sometimes leads to verbal and physical violence to classmates. Similarly İnci (2014) stated, students of gifted students can show problem behaviors such as opposing authority, difficulty in making friendship, anxiety due to perfectionism, stubbornness, desire to become a leader and self-centeredness due to extreme self-confidence, jealousy, difficulty in accepting mistakes, insisting on not doing unpleasant activities and day dreaming during activities. However, a teacher who specializes in education of gifted students should have the ability to cope with

unwanted behaviors an environment where gifted students are educated together, by using effective classroom management principles.

Despite the fact that unwanted student behaviors are inevitable in the school environment of very socioeconomic level and each educational level, where students with normal development or special education needs are inevitable, the high rate of such behaviors leads to a decrease in the quality of education and leads to a loss of time and energy. For this reason, one of the main tasks of teachers is to reduce such behavior. Thus, both students' participation in class activities increases and teacher energy and time can be directly directed to education and training activities.

Middle school years coincide with the adolescence in which physical, mental, psychological and social changes are experienced, and both the personality development and the desire to be independent are the forerunners. Adolescence, which is the transition period from childhood to adulthood, is regarded as a period in which emotional fluctuations arise from rapid development. Since adolescence is a process of change, it can create anxiety and stress in the individual; an increase in adverse behaviors can be seen in adolescents (Siyez, 2009). For this reason, unwanted behaviors are concentrated in the middle school period.

In cooperation with teachers, administrators and parents, it is possible to approach the events in an understanding manner and motivate them with programs that respond to the interests and needs of the students, thus minimizing unwanted behavior (Özdayı, 2004). Glasser (1999a), who has important work in this regard, argues that the choice theory can largely overcome problems experienced in schools. According to Glasser (2003), who is influenced by behavioral and cognitive approaches, most notably by the theory of information processing, while developing choice theory, behavior is not responses to external stimuli. According to the choice theory, everything done is our own choice. This approach, which is didactic and guiding, aims the actuation of the individual in order to develop the individual control.

Glasser's Choice Theory

According to Glasser (2003), human behavior is aimed at meeting five basic needs that exist genetically in man. The five basic needs that the individual has genetically are survival, belonging, power, fun and freedom. Survival is a physiological need to maintain the life that is the primary of these needs. The other four needs (belonging, power, fun, freedom) are the basic psychological needs that motivate people. These universal basic needs that exist in everybody are interrelated, interchangeable or mutually supportive. Each person has his own way of meeting these needs (Wubbolding, 2015). If a student shows an unwanted behavior, the reason is an unmet need. These unmet needs in the family should be met at school. The basic function of the school is to satisfy all the needs of the students. The school responding to these needs is called 'quality school'. There is no punishment or pressure in the quality school; there is respect and cooperation. In quality schools, teachers do leadership, not patronage. If the teacher exhibits bossy behavior, the teacher is based on the opposition of the student relationship, which is a demolition in terms of quality; because students see it as a place where they cannot find satisfaction in school. In such an environment it is not possible to achieve quality that requires creativity and patience (Glasser, 1999b).

Building a student-centered classroom management approach, Glasser (2003) suggests that unwanted behavior and disciplinary problems can be solved by choice theory rather than external control. In other words, disciplinary problems cannot be

prevented with punishment; but can be prevented by giving them responsibility for their own behaviors with interest, listening, support, negotiation, reward and courage, love, friendly approach, trust, acceptance, welcome and value. The task of the lead teacher is to orient students positively and to create a better learning environment for the class. A very important point according to Glasser is to teach students how to learn. Thus, when students gain competence, they can solve problems independently from the teacher, which is the ultimate goal of education. Glasser's pioneering quality schools and management philosophy are focused on improving the communication, choice and accountability of individuals that are expected to be possessed by today's world. Students who grow in quality schools will also be the driving force for developing collective quality as responsible individuals. Unlike teacher-centered approach in which the teacher is active and the student is passive in traditional classroom management (Aydn, 2010); Glasser's approach gives "leader" role to teacher in guiding the quality journey, according to the needs of the student. Table 1 compares the characteristics of the boss and the leading teachers.

Table 1.

Comparison of Boss and Lead Teachers

Boss teachers	Lead teachers
They put rules their own.	They put rules jointly with students.
The authority of the teacher is the master of the class.	They give responsibility to students.
They only transmit information to students.	They guide students.
They apply pressure, mostly punishment.	They encourage inner discipline in students.
They do not care about the needs of the students.	They care about the needs of the students.
They focus on negative behaviors.	They focus on positive behaviors.

The lead teacher ensures a positive learning environment by actively incorporating the learners into the learning process, supporting the learning desires of the students and making the learning activities fun. In such an environment, students are less likely to see unwanted behaviors because they enjoy learning.

In-service Training Needs of Teachers

Certain qualities of teachers are also effective causes of unwanted student behaviors. The lack of knowledge and skills related to classroom management for teachers is a subject of research as an important problem (Alkaş, 2010; Atıcı, 2003; Çetin, 2013; Danaoğlu, 2009; Demir, 2013; Özdemir, 2009; Sadık, 2006; Yüksel and Ergün; 2005). This problem, especially encountered by new teachers in the profession, has also influenced experienced teachers, depending on the changes in the educational philosophy in recent years. In classrooms where teaching is unqualified and teachers' expectation is low, unwanted behaviors of students increase (Ataman, 2003). In the effective teaching and learning environment, unwanted behaviors are less frequent. For this reason, teachers should have good classroom management skills to prevent negative student behaviors (Türnüklü, 2000a). In an effectively managed class, the level of students' involvement in the teaching process is low, the level of unwanted

behavior is low, and most of the teaching time is used for teaching purposes. Classroom management approach should be determined considering both the development period of the students and the characteristics of the students (Başar, 1999).

As a result of the researches that reveal the inadequacies of the teachers' knowledge and skills about classroom management (Demir, 2013; İlgar, 2007; Sadık, 2006, Siyez, 2009; Yüksel, 2013) it can be said that in order to increase the knowledge and skills of teachers about their professions, to keep up with current developments and to learn innovations in practice, they may need in-service training. Küçükahmet (1997) stated that in-service training for teachers is necessary because of the changes in science, changes in the society, changes in the school, changes in the teachers themselves, changes in the teaching process, progress in child development, elimination of deficiencies caused by teachers' pre-service training and the necessity of filling in communication gaps. It is seen that when the education policies of the developed countries such as the United States of America (USA), Japan, Germany, England, Finland are examined, the in-service education of the teachers is very important today (Abazaoğlu, 2014).

The education system that will train the human power required today can only succeed with the teachers who develop themselves by adopting the contemporary education approaches. Within the scope of special education, teachers who are in the training of gifted students who are a non-standard group should have extra qualifications (Ataman, 2004; Dağlıoğlu, 2010). However, Demirhan, Kaya Uyanık, Canan Güngören and Gür Erdoğan, (2016) revealed that teachers are not sufficient in education of gifted by searching the websites of 70 universities with a classroom teaching program in Turkey. According to the findings, there is a course called 'special education' that handles the topics related to the gifted in 68 of those 70 universities, and in the rest, there is no course titled either 'special education' or 'gifted'. When the special education course is investigated, it is seen that objectives concerning the gifted take the last places and the contents addressing the gifted takes the third place.

As regards effective classroom management, which is one of the most important skills that all teachers should possess, gifted students need to adopt an approach that is consistent with the characteristics of the group of teachers they work with. For this reason, it would be more appropriate to choose contemporary approaches instead of traditional approaches in classroom management. In the participatory and flexible contemporary classroom management, basic elements such as class rules, teaching methods and the aim of the course are discussed democratically (Aydın, 2010).

A democratic classroom environment and a teacher attitude that respects the individuality of students also allow the development of creativity, one of the most important characteristics of gifted students. In this context, the qualities that must be found in the teachers who will be employed in the education of the gifted students and the qualitative education understanding based on Glasser's choice theory overlap the expected roles of the teachers. In the qualifications of teachers emphasized in scientific studies on both sides, democratic attitudes, respect for and respect for students, helping to reveal the creativity of the learners, increasing the internal motivation for learning more from the knowledge of the students, in short, leadership skills are the forefront. For the gifted students who naturally ask questions, questioning, reject being directed by others, but accepting the logic of

their own, think that 'quality' schools, where teachers are to lead them, would be appropriate; in this study, the effectiveness of the choice-based training program for teachers to change the unwanted behaviors of gifted students was examined.

The basic question to be answered in this research is the shudder; "Is the in-service training program based on Glasser's choice theory prepared according to Taba model that is given to teachers of gifted middle school students effective?"

Within the scope of the research, the following sub-problems were also searched:

- Is there a meaningful difference in the prevalence of unwanted student behaviors before and after the teacher in-service training based on Glasser's choice theory, prepared according to Taba model, for the teachers of gifted middle school students?
- What are the teachers' views about the in-service training based on Glasser's choice theory, prepared according to Taba model, for the teachers of gifted middle school students?
- Is there a meaningful difference in the classroom management skills of teachers in the classroom before and after Glasser's choice theory-based in-service training for teachers of gifted middle school students, prepared according to Taba model?

Purpose of the research

Gifted students, like all students, need a psychologically secure classroom atmosphere (Maker and Nielson, 1996: 177) in which they feel comfortable and can freely share their ideas and perceive threats to discover and develop their strengths in the educational setting. Positive classroom atmosphere of teachers not only affects the academic achievements, motivations, cognitive developments but also social relations and social and emotional development of gifted students positively. Özbay and Palancı (2011) point out that, in the scientific studies on the education of gifted students, the focus is generally on the field of superior cognitive ability; whereas the problems that may be experienced in other developmental areas, especially psychological and social aspects, should also be examined. Given the leadership and perfectionism characteristics of gifted students in the educational environment, they can be used in a positive way. However, in order to achieve this in a class of all gifted students, teachers need to have an understanding of class management that is in line with the characteristics of gifted students. However, some of the teachers did not have a 'special education' course during university education, and some of them may be inadequate knowledge about gifted students. In-service training is very important for the elimination of the lack of knowledge of teachers and for updating existing information. In this context, it is very important for the teachers of the gifted students to increase their knowledge of the classroom management skills that are appropriate for the student group they are working on and to re-examine their current knowledge and skills. It is thought that this study, which examines the effect of Glasser's choice theory on reducing unwanted behaviors, a classroom management approach that is suited to disciplinary problems of gifted students, will shed light on the lack in the area.

In today's world, where much of the quality of education is important, the question of how to educate gifted individuals should be investigated. Disciplinary approaches applied in the educational environment are also an important issue when they are considered from this point of view. The number of scientific studies done in this

area is well below expectations, and it is thought that a study that will increase the qualifications of teachers, especially those trained for gifted students, will be very beneficial. The choice theory and classroom management approach, developed and implemented by Glasser and which has been proven successful, is also a research topic that has not been dealt with in Turkey. This research assesses the application of the theory of choice-based classroom management to the training of gifted students in special education. In this respect, gifted students are a step to be taken in order to provide a better quality education. It is important to emphasize the importance of adopting appropriate approaches to the characteristics of the students in the education of special education students and to develop the knowledge and skills of teachers for this purpose; it can be said that this context will provide important contributions to the field of special education.

Method

Research Model

In this study, both qualitative and quantitative data were collected and two data types were analyzed to answer research questions. Both the quantitative and the qualitative methods have been used together in the process of determining the educational needs of teachers according to Glasser's choice theory according to Glasser's choice theory, and in the process of applying and evaluating the program. In the first phase of the study, the training needs of the teachers were determined. In the next step, an experimental study was conducted to investigate the effect of an independent variable on the dependent variable. The trial method is a research method in which the data to be observed are produced under the control of the researcher in order to determine causal relationships. In this way, judgments about possible causes of events are tested (Karasar, 2002: 87). The design of this research is "Single group pretest-posttest model". In a single group pretest-posttest model, a randomly selected group independent variable is applied. There are both pre-test and post-test (Karasar, 2002). At this stage, a curriculum was developed by the researcher on the classroom management approach to prevent unwanted behaviors based on Glasser's choice theory. The prepared program was applied to the experimental group, and then the program was evaluated

Dependent variables of the study: The scores of frequency of students' unwanted behaviors and the scores of the teachers in the classroom observations are the dependent variables of this research

Independent variable of the study: The independent variable of this research is a 30-hour teacher education program based on the Taba model by the researcher on Glasser's choice theory-based approach to prevent unwanted behavior.

Participants

The study's study group consists of branch teachers working in a secondary school where students identified as gifted are trained. The research process was conducted with three branch managers and two guidance teachers and 15 branch teachers, and ten branch teachers from this group participated in the experimental phase.

The curriculum is enriched in the school where the study is conducted, and is taught by students who are recognized as gifted and / or talented. Various workshops have been established in order to improve the intelligence and skills of the students. Furthermore, within the cooperation with the universities, lecturers organize seminars for students, parents and teachers. All students participate in

scientific projects by going to various universities 2 hours a week in groups. In 2015, it was the first school in Turkey to join the World Council of Gifted and Talented Children.

The educational model of the school is based on the system described by Renzulli (1990) as the 'Talent Pool'. The focus of the diagnostic system is to ensure that students are selected through a variety of measurement methods and are involved in creative productive activities and experiences. Highly potent pupils in the school environment are included in the talent pool by 15-20% of the student group with various measures such as success tests, teacher recommendations, creativity evaluation, study examples. Students are also observed in enrichment experiences made in the class to determine their advanced level of interest, creativity and motivation (Renzulli and Reis, 1994).

At the time of this study, there were 63 students, consisting of 18 girls and 45 boys in secondary school. The 5th grade is divided into two branches, the 6th, 7th and 8th grades are one branch. Classroom availability is between 10 - 15 students. These are convenient for classroom management as well as suitable for a school serving gifted students within special education. In the school there are 9 lessons on weekdays, 5 lessons before lunch and 4 lessons after lunch. Apart from the compulsory and elective courses that are included in the 35-hour weekly course schedule determined by Ministry of National Education for all junior high schools in Turkey, the activities and activities required by the enrichment approach are included. Enrichment is carried out based on the training process, also in order to achieve efficient results besides curriculum content and product enrichment, acceleration and grouping approaches are integrated into the program.

In order to determine the educational needs of the teachers, a total of 20 teachers were interviewed, three of whom are managers, two of whom are counselors, one is Turkish, three are Mathematics, two are Science and Technology, one is Social Studies, four are Foreign Language, two are Visual Arts, one is Music and one is Religion Culture and Ethics Education. Also 15 teachers from this group were observed by the researcher in the classroom according to classroom management skills. The final step of the study was the in-service training course and there were a total of ten teachers, one of them in Turkish, two of them in mathematics, two of them in Science and Technology, one in Social Studies, three in Foreign Language, one in Religion Culture and Moral Education.

Data Collection Tools

Six data collection tools were used in this study. In order to determine teachers' need for in-service training, data on unwanted student behavior at school was collected through "School Manager and Counselor Interview Form" and "Teacher Interview Form". The semi-structured interview forms developed by the researcher after literature review; consisted of open-ended questions and were interpreted qualitatively. After the training, "Teacher Education Evaluation Form" was used to collect qualitative data. The semi-structured interview forms used were developed by the researcher.

The quantitative data used in the research were collected by "Teacher Survey about Frequency of Unwanted Student Behavior" which consists of 20 items, "Observation Form of Teacher Behaviors in Class" consisting of 25 items and "Teacher Observation Form of Classroom Management Based on Choice Theory" consisting of 20 items. These data collection tools were also developed by the

researcher. Data collection tools were developed after literature review and getting opinions from expert academicians.

Research Process

The research process consists of the identification of training needs, the development, implementation and evaluation of the program. In order to carry out this research, official permission was obtained from Ankara National Education Directorate. The educational needs of teachers were determined through interviews conducted in 2. semester of 2014-2015 Academic year. For the collected data to be unilateral, data were obtained from three sources: school administrators, guidance teachers and teachers, using data triangulation (Sadik, 2006, cited in Denzin).

Later, the school administrators were informed about the research and study was planned. Teachers and students who were to be observed in their classrooms were interviewed before the observations started, and the researcher introduced herself and gave the necessary information about the research. Voluntary participation of the individuals in the survey was provided both ethically and to increase validity and reliability.

Program Development Process

The training program applied in the research was developed according to Taba model. Developed by Hilda Taba, this model has been widely used in the field of curriculum development both in the USA and Turkish education system. In Taba model, which has stages developed according to the induction approach, firstly the educational needs, then the objectives and then the content suitable for the purposes are selected and planned. After the content is edited, the learning experiences are selected and the evaluation phase is started. At this stage, it is determined how to evaluate what. At the last stage, the sequence of the program items and the relations are controlled and the final state of the program is given (Demirel, 2008).

In order to develop the teacher training program, it has been determined in what areas teachers need in-service training about unwanted student behaviors. Different tools such as questionnaire, observation, interview and document analysis can be used to determine the in-service training needs of teachers (Taymaz, 1997). However, when determining the need for in-service training, interviews were conducted with the school management and guidance teachers, and then with the branch teachers, only because it limits the objectivity of the data to questioning teachers' own teaching skills (Kıldan, 2008). The data obtained from the interview form were examined and the themes were determined, then the content codes were determined and the data were analyzed using frequency distributions and percentages. Results show that gifted students have negative behaviors towards their friends and obstructing the learning process. These findings can be interpreted as the need for in-service training of teachers to cope with unwanted behaviors in students. According to the results obtained from these interviews, gifted students who are identified as needing in education by the teachers are included to cope with appropriate methods, student-centered teaching approach, increasing motivation of students and coping with unwanted behaviors in students.

Since it is not enough to use only interviews when determining the need for in-service training, data have also been collected through the observation of teachers in the classroom. Teachers' classroom management skills were observed in five areas: Teacher-student interaction, learning process management, student-centered learning environment creation, teaching methods and preventive behavior

management. Expert opinions and the form prepared after field literary examination to determine the teachers' in-service training needs were observed for 40 minutes in the fourth grade, with 15 teachers being at different times. Grades 1-5 were used to determine the extent to which teachers performed the features on the form. The sub-scores for the five areas included in the form for each observation were then calculated. Accordingly, for each teacher, four different points for each area were calculated. Then, averages of these four points were taken for each area. In order to ensure the inter-observer reliability, video-recorded images were analyzed according to the observation form of the class teacher behaviors prepared by the researcher by two academicians who did a doctorate in the field of special education besides the researcher. The inter-observer reliability coefficient was also calculated for the stage in which 10 teachers were observed in the class before and after the training. Reliability coefficients were between 86% and 99%.

Educational needs of teachers were analyzed and the goals of education were determined. At the forefront of the areas where teachers of gifted students need in-service training comes prevention management and the creation of a student-centered learning environment. However, the teaching methods are moderately higher when the average scores of the learning process management and teacher-student interaction areas are relatively high, but are evaluated relative to the highest achievable score. For this reason, it can be said that teachers need education in these fields. It has been determined that teachers need training in teacher-student interaction, management of learning process, creation of student-centered learning environment, teaching methods and preventive behavior management. These topics are also included in the program development process (Kaya and Ataman, 2017). The general characteristics of gifted students, gifted adolescents, and the creation of a suitable educational environment for gifted students are among the goals of the choice theory, which is developed by Glasser, as the characteristics and needs of students are taken into account in the concept of classroom management. Later on, opinions on choice theory, identity, choice, behavior, responsibility, and evaluation were added to the content, both from the thesis monitoring committee and from academicians who are experts in choice theory. Thus, first the needs, then the objectives and the content are determined. Expert opinion has been consulted in the course of regulating the content specified. In the choice of learning experiences, examples of how the choice theory will be applied in the class is given. Attention has been paid, however, to the inclusion of specimens of teachers' areas, to express the participants' problems and to discuss them and to create an interactive classroom environment in order to solve these problems. The program has been prepared by making necessary corrections and arrangements in line with expert opinions.

Afterwards, the school administration, the guidance service, and the teachers were interviewed and volunteers from the branch teachers who entered the class in the 6-A class, where the unwanted behavior was most intense, were selected for the experiment group. Experiments were conducted by ten researchers who were selected for the experiment group and whose subjects were Turkish, Mathematics, Science and Technology, Social Studies, Foreign Language, Visual Arts, Music, Religion Culture and Ethics. For the evaluation of the program, "Teacher Observation Form of Classroom Management Based on Choice Theory" was developed for evaluating the observations in the classroom firstly and the expert opinions about the form were taken and the necessary corrections were made and used as a data collection tool. Observation results were compared with the

observation form prepared according to Glasser's choice theory-based classroom management approach and the results before and after the training were compared. Prior to the start of the training, pre-test was conducted between 09.03.2015 and 13.03.2015 in the 6-A class. The observation period is one lesson, 40 minutes. The researcher was seated at the back of the classroom and recorded a video without any effect on what was happening in the class. At this stage, it is said that the researcher observes the behaviors of the students for the purpose of life and natural behaviors. Observation results were assessed using an observation form prepared according to Glasser's choice theory-based classroom management approach. In addition, the frequency of observing unwanted behaviors was determined by applying the "Unwanted Behavior Survival Questionnaire of Students in the Classroom" on 13.03.2015.

Application Process

Glasser's choice-based teacher training program, which was prepared according to Taba model from the program development models, was applied between 9: 00-12: 00 on Saturday between 14.03.2015 and 16.05.2015, when the teachers reserved for in-service training . The practice lasted for 10 weeks, three hours a week. The content of the program was prepared as a PowerPoint presentation and presented to the teachers through projection and distributed as a written document. In addition, the materials provided by the researcher in relation to the program have been made available to the teachers' service, allowing them to have more detailed information about the subject. The notes and supplementary resources were also provided to the demanding teachers, thus helping teachers to increase their equipment. Teachers should be active through case studies and discussion about the topics determined during the training process. With the participation of the teachers, a classroom atmosphere of interactivity was tried to be created.

Evaluation of the Program

After the training, in the lessons of 6-A, Turkish, Mathematics, Science and Technology, Social Studies, Foreign Language, Visual Arts, Music, Religion Culture and Moral Education teachers were observed as a final test. The results of the observations were compared with the pre- and post-training results by evaluating the results with the "Teacher Observation Form based on Choice Theory" which was prepared according to Glasser's choice -based classroom management approach.

Apart from practice, classroom visits were also carried out during the course, and teachers were instructed to apply what teachers learned in their classrooms. In this process, teachers write school and class rules together with the students and sign all under the students and put them on the paper class panels; It is the developments observed by the researcher that the students prepare their presentations by choosing the subjects they want in the lessons and that the teachers have warmer and supportive relations with the students. This is an indication that the teachers immediately apply what they learn during the training.

In addition, teachers were asked to repeat the questionnaire on unwanted behaviors of students in class before the training. The frequency of undesired behaviors with the questionnaire applied on 26.05.2015 was compared with the data given before the training.

At the end of the training period, semi-structured interviews were conducted to the teachers within experimental group. At these interviews, the opinions of the teachers about the education given were determined.

Analysis of Data

Both quantitative and qualitative data collection methods were used in this study. While statistical methods were used in the analysis of quantitative data, content analysis was performed for qualitative data. According to Best and Kahn (1998), it is appropriate to use nonparametric techniques in cases where the number of participants in a study is less than 30, the groups are not homogeneous and normal distribution is not available. Mann Whitney U and Wilcoxon signed rank test were used as nonparametric statistical methods in the analysis of quantitative data since N was less than 30 in this study and group did not show normal distribution. The data were analyzed by SPSS 20 (Statistical Package for Social Sciences), a statistical package program for social sciences.

Content analysis was conducted in the analysis of qualitative data. In content analysis, similar expressions are organized in an understandable way by combining them in the context of certain concepts and themes and interpretations are made (Yıldırım and Şimşek, 2013). Analysis of research data consists of coding of data, finding of themes, arrangement of codes and themes, and identification and interpretation of findings. The data obtained from the study are summarized and coded according to the previously determined theme. The relevant literature has been taken into consideration when the coding process is carried out. Descriptive content analysis is completed in 3 stages. In the first stage, a framework for data analysis has been established by starting from the research questions. In the second phase, the data are read and classified according to the main theme set in the previous phase. In the third stage, information is given according to the theme and sub theme, and the information emerging with the necessary quotations is presented in relation to each other. Qualitative data were analyzed using frequency distributions and percentages.

Results

The basic question of this research was determined as "Is the in-service training program based on Glasser's choice theory given to teachers of gifted middle school students effective?" and accordingly three subproblems were searched. Results obtained from the research are explained below.

Results on the First Sub-problem of the Study

In the first sub-problem of "Is there a significant difference in the frequency of unwanted student behaviors before and after the in-service training of teachers based on Glasser's choice theory, prepared according to the Taba model, for the teachers of gifted secondary school students?" It was decided to apply the t test for dependent groups in order to determine how they changed. However, because the sample size was not sufficient (N = 10), the Wilcoxon signed rank test, which was a nonparametric counterpart of the t test for dependent groups, was administered. This test was applied individually for each item. Thus, what behaviors of the students changed after the training has been examined in more detail. Survey items were scored as "never = 1"; "rarely = 2", "sometimes = 3", "often = 4", "always = 5". Thus, high scores mean unwanted behaviors were more frequent and low scores showed less unwanted behaviors. In Table 2, descriptive statistics about the

frequency of unwanted behaviors seen in the classroom environment before and after the training were given.

Table 2.

Descriptive Statistics on frequency of Unwanted Behaviors of Students in Pre-and Post-Training

Item	N	Mean		Smallest		Highest	
		Pre-training	Post-training	Pre-training	Post-training	Pre-training	Post-training
Item 1	10	4.00	3.20	3.00	2.00	5.00	4.00
Item 2	10	3.60	2.90	3.00	2.00	5.00	5.00
Item 3	10	2.60	2.20	2.00	1.00	3.00	3.00
Item 4	10	3.30	2.70	2.00	1.00	4.00	4.00
Item 5	10	3.10	2.30	2.00	2.00	4.00	3.00
Item 6	10	4.00	3.10	3.00	2.00	5.00	4.00
Item 7	10	3.90	2.90	3.00	2.00	5.00	4.00
Item 8	10	3.70	2.50	2.00	2.00	5.00	4.00
Item 9	10	3.80	2.80	2.00	2.00	5.00	4.00
Item 10	10	3.50	2.60	2.00	2.00	5.00	4.00
Item 11	10	4.00	3.00	3.00	2.00	5.00	4.00
Item 12	10	2.10	1.60	1.00	1.00	3.00	3.00
Item 13	10	3.10	1.90	1.00	1.00	5.00	3.00
Item 14	10	2.60	1.80	2.00	1.00	4.00	3.00
Item 15	10	3.00	2.20	2.00	1.00	4.00	3.00
Item 16	10	2.50	2.10	1.00	1.00	3.00	3.00
Item 17	10	2.80	2.00	2.00	1.00	4.00	3.00
Item 18	10	2.90	2.30	2.00	2.00	4.00	3.00
Item 19	10	4.00	2.80	2.00	2.00	5.00	4.00
Item 20	10	2.70	2.10	2.00	2.00	4.00	3.00

Table 2 gives the mean, smallest and highest values for each item. Although there is no change in the highest and lowest values of some items before and after the training, there is a decrease in the mean, as striking at the table. According to the mean, smallest and highest values, especially, "Item 1: To disrupt class order ", "Item 5: To harm the school property", "Item 6: Not to follow directives", "Item 10: To ask irrelevant questions in lessons", "Item 15: Not do homework ", and "Item 19: To get out of classroom without permission" seem to show a significant decrease in behavior after the training given to the teachers.

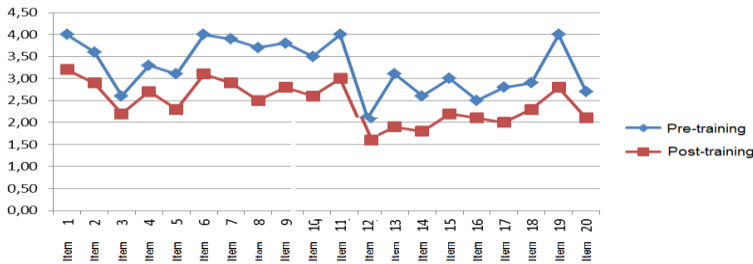


Figure 1.
Distribution of the Mean of the Items in the Pre-training and Post-training Frequency Survey of Adverse Behavior in the Classroom Environment

In order to see more clearly the items displayed before and after the training, the means of each item are shown graphically in Figure 1. As seen in the graphic, pre-training means for all items are higher than post-training means. The higher the score, the greater the frequency with which it appears. From this point of view, the frequency of students showing unwanted behaviors decreased after the training given to teachers. To assess whether this decrease was statistically significant, Wilcoxon signed rank test, one of the nonparametric tests, was performed for dependent groups and the results are given in Table 3.

Table 3.
Comparisons of Wilcoxon Signed Ranks Test for the Prevalence of Unwanted Behaviors in the Classroom Before and After the Training

			Means of Ranks	Sums of Ranks	Z	p
1. To disrupt class order	Negative Value	7	4.00	28.00	-2.53*	0.011
	Positive Value	0	.00	.00		
	Equal	3				
2. To mock with friends	Negative Value	6	3.50	21.00	-2.333*	0.020
	Positive Value	0	.00	.00		
	Equal	4				
3. To swear at friends	Negative Value	3	2.00	6.00	-1.633	0.102
	Positive Value	0	.00	.00		
	Equal	7				
4. To fight with friends	Negative Value	5	3.00	15.00	-2.121*	0.034
	Positive Value	0	.00	.00		
	Equal	5				
5. To harm school property	Negative Value	7	4.00	28.00	-2.530*	0.011

	Positive Value	0	.00	.00	
	Equal	3			
6. Not to follow directives	Negative Value	8	4.50	36.00	0.07
	Positive Value	0	.00	.00	-2.714*
	Equal	2			
7. To deal with other things during lessons	Negative Value	7	4.00	28.00	0.015
	Positive Value	0	.00	.00	-2.428*
	Equal	3			
8. To stand up without permission during lessons	Negative Value	7	4.00	28.00	0.016
	Positive Value	0	.00	.00	-2.401*
	Equal	3			
9. To talk without permission during lessons	Negative Value	7	4.00	28.00	- 0.015
	Positive Value	0	.00	.00	2.428*
	Equal	3			
10. To ask irrelevant questions in lessons	Negative Value	8	4.50	36.00	- 0.07
	Positive Value	0	.00	.00	2.714*
	Equal	2			
11. To be distracted during lessons	Negative Value	8	4.50	36.00	- 0.08
	Positive Value	0	.00	.00	2.640*
	Equal	2			
12. To slumber during lessons	Negative Value	5	3.00	15.00	- 0.014
	Positive Value	0	.00	.00	2.236*
	Equal	5			
13. To be disrespectful to teachers	Negative Value	7	4.00	28.00	- 0.023
	Positive Value	0	.00	.00	2.460*
	Equal	3			
14. To use slang words	Negative Value	6	3.50	21.00	- 0.011
	Positive Value	0	.00	.00	2.271*
	Equal	4			

15. Not to do homework	Negative Value	7	4.00	28.00	-	0.011
	Positive Value	0	.00	.00	2.530*	
	Equal	3				
16. To come late to classroom	Negative Value	3	2.00	6.00	-	0.102
	Positive Value	0	.00	.00	1.633*	
	Equal	7				
17. To lie	Negative Value	6	3.50	21.00	-	0.023
	Positive Value	0	.00	.00	2.271*	
	Equal	4				
18. Not to obey school clothes except for free day (Wednesday)	Negative Value	5	3.00	15.00	-	0.034
	Positive Value	0	.00	.00	2.121*	
	Equal	5				
19. To get out of classroom without permission	Negative Value	9	5.00	45.00	-	0.006
	Positive Value	0	.00	.00	2.762*	
	Equal	1				
20. To deny his/her mistakes	Negative Value	5	3.00	15.00	-	0.034
	Positive Value	0	.00	.00	2.121*	
	Equal	5				

*In favor of positive ranks

According to results in Table 3; a significant difference exists in terms of frequency of unwanted student behaviors between pre and post training in all items except Item 3: "To swear at friends" ($z=-1.633$, $p>0,05$) and Item 16: "To come late to classroom" ($z=-1.633$, $p>0,05$). When Table 3 and Figure 1 are evaluated together, it is observed that the frequency of unwanted behaviors of students decreases after training.

Results on the Second Sub-problem of the Study

In order to answer the second sub-problem of "what are the opinions of branch teachers about the in-service training based on Glasser's choice theory to change the unwanted behaviors of gifted junior high school students in the class", data was collected using semi-structured interview questionnaire form applied to the branch teachers. First, six themes were identified, namely, the topic of education, the content of education, the use of educational proposals in the professional life, the benefits of preventing unwanted behaviors, positive opinions about education, and negative opinions about education. The content codes were then determined and

analyzed using frequency distributions and percentages. The findings are shown in Table 4.

Table 4. Teachers' Opinions about Educational Practice

Themes	Content Codes	f	%
1. The topic of training	Suited to living problems	5	50
	Helpful for adolescence	3	30
	Topic was general	2	20
	Total	10	100
2. Content of the training	Appropriate	6	60
	It must contain more applications	2	20
	It must be more special	2	20
3. Use of educational proposals in professional life	Useful	5	50
	Helpful	3	30
	Hard to practice	2	20
4. The benefit of avoiding unwanted behavior	Total	10	100
	It is helpful	7	70
	It is partly helpful	3	30
5. Positive views about training	Total	10	100
	Learning a different approach	4	40
	Helpful to change behavior	3	40
	Being more self-confident in class	3	30
6. Negative views about training	Total	10	100
	There was a lot of repetition	3	30
	It does not work in some students	3	30
	There were not enough applications	2	20
	The training was too long	2	20

As seen in Table 4, the teachers participating in the study pointed out the views of about the topic of the training as "Suited to living problems" (f=5), "Helpful for adolescence" (f=3) and "Topic was general" (f=2).

"The topic of the training was about the problems we live in school. I learned new information about how to behave when I face problems." (Teacher 9).

About the content of the training, most of the teachers (f=6) define it as appropriate while some said that it must contain more applications (f=2) and it must be more special (f=2).

"The content of the training was prepared appropriate for our school and students." (Teacher 4).

Most of the teachers answered the question concerning the use of educational proposals in the professional life as useful (f = 5) and helpful (f = 3), although only 2 teachers indicating that it is difficult to practice.

"I think that the propositions will be beneficial to me in my professional life" (Teacher 7).

Most of the teachers (f=7) think that training is helpful to avoid unwanted behavior while others think it is partly helpful (f=3).

"I think that this training is helpful to avoid unwanted behavior." (Teacher 3).

When the positive views about the training is asked, some teachers (f=4) stated that they learned a different approach, some (f=3) stated that it is helpful to change behavior and others said (f=3) they feel more self-confident in class.

"I can look more patient, expert and multidirectional to problems. I feel more self-confident in class." (Teacher 10).

The negative views about the training are stated as, there was a lot of repetition (f=3); it does not work in some students (f=3); there were not enough applications (f=2) and the training was too long (f=2).

"I am trying to apply the information I learned in training to the class. But the problem persists in a few students." (Teacher 5).

Most of the teachers stated that, the topic of the training suited to their problems and helpful for adolescents. About the content of training, most of the teachers think it is appropriate while others think it must contain more applications and be more special. Most of the teachers find it useful and helpful for professional life. Although most of them view the training helpful in avoiding unwanted behavior, some think it is partly helpful. When positive views about the training is asked, some of the participants stated that they learned a different approach, some of them stated that it is helpful to change behavior and some feel more self-confident in class. Negative opinions about education are; there was a lot of repetition; it does not work in some students; there were not enough applications and the training was too long. As a result, it can be said that the education provided is useful for the needs of the teachers, the problems that are alive in the solution of the problems, the elimination of some missing information and the reduction of the unwanted behaviors.

Results on the Third Sub-problem of the Study

To find answer to the third sub-question "Is there a meaningful difference in the classroom management skills of the teachers in the classroom before and after Glasser's choice theory-based in-service training to change the undesirable behavior of gifted middle school students in the classroom?" teacher observation form' scores were compared. Ten teachers who participated in the study were evaluated according to the measuring instrument consisting of 20 items and 4 sub-dimensions 4 times before the training and after the training.

Then, to ensure inter-observer reliability, the same videos were re-evaluated by the same measuring instrument by a specialist with a doctorate degree in the field of special education, and each teacher's scores were calculated by taking the average of the scores obtained. Descriptive statistics of the pre-education and post-training scores of the 4 sub-dimensions of the teachers' measuring instrument are given in Table 5.

Table 5.

Descriptive Statistics of Teachers' Pre-Training and Post-Training Scores from 4 Sub-Dimensions of the Measuring Instrument

	N	Mean	Standard deviation	Minimum	Maximum
Quality teacher-student interaction (pre-training)	10	14,850	2,021	10,75	17,00
Quality teacher-student interaction (post-training)	10	17,078	,416	16,43	17,64
Creating student centered learning environment (pre-training)	10	14,425	2,058	9,75	17,25
Creating student centered learning environment (post-training)	10	16,535	,562	15,79	17,50
Creating quality school environment (pre-training)	10	15,175	2,086	10,25	18,25
Creating quality school environment (post-training)	10	16,999	,418	16,14	17,50
Preventive behavior management (pre-training)	10	13,100	1,113	10,50	14,75
Preventive behavior management (post-training)	10	16,314	,596	15,50	17,21

As seen in Table 5, means of teachers' scores post-training from all subscales are higher than the means of scores pre-training. When the difference between means of scores pre and post training were examined, it is seen that there is a further increase in post-training scores especially in the preventive behavior management sub-dimension. The increase in post-training scores is also seen in the smallest scores. In the highest scores, it was determined that post-training scores were higher in "Preventive behavior management" and "Creating a quality school environment" sub-dimensions. When standard deviations are examined, it can be said that the scores given before the training are more heterogeneous, while the scores given after the training are more homogeneous. This result may be caused of the teachers gaining experience from the training.

It was decided to use the t test for dependent groups to test whether the scores obtained before and after training were statistically different. But the t test is a parametric test. To be able to apply parametric tests, the sample size must be sufficient and the conditions such as the normal distribution of the scores must be met. When Table 6 is examined, it was decided to apply the Wilcoxon test, which is

a non-parametric counterpart of the t test for dependent groups, since the sample size is N = 10. Test results are given in Table 6.

Table 6.

Comparison of Teachers' Scores from the Subscale of the Pre-and Post-Training Instrument to the Wilcoxon Marked Rank Test

			N	Means of Ranks	Sums of Ranks	z	P
Quality teacher-student interaction	Negative Value	0	,00			-	,005
	Positive Value	1	5,50	55,00	2,803*		
	Equal	0					
Creating student centered learning environment	Negative Value	0	,00			-2,803*	,005
	Positive Value	1	5,50	55,00			
	Equal	0					
Creating quality school environment	Negative Value	1	2,00	2,00		-2,599*	,009
	Positive Value	9	5,89	53,00			
	Equal	0					
Preventive behavior management	Negative Value	0	,00			-2,803*	,005
	Positive Value	1	5,50	55,00			
	Equal	0					

*In favor of positive ranks

According to the test results in Table 6, the scores of the Teachers who participated in the research before and after education were "Quality Teacher-student interaction" ($z = -2,803, p < 0,05$); "Creating a student-centered learning environment" ($z = 2,803, p < 0,05$); The difference is in the dimension of "creating a quality school environment" ($z = -2,599, p < 0,05$) and "Preventive behavior management" ($z = -2,803, p < 0,05$). When both Tables 5 and 6 are evaluated together, it can be said that post-training scores are higher than pre-training scores. According to this, it can be said that the applied education developed the behaviors of "Teachers of high quality", "Student-centered learning environment", "Creating a quality school environment" and "Preventive behavior management".

Discussion and Conclusion

In this study, the effectiveness of the teacher training program, which was designed according to Glasser's choice theory for the change of gifted middle school students' classroom unwanted behaviors, was firstly determined. Then a training program based on Glasser's choice theory was developed and applied for these needs. In the

light of the findings from the collected data at all these stages of the study, the following conclusions were reached and discussed together with the results of similar studies.

The data obtained from the interviews stated that disciplinary problems can be solved by student-centered processing of the courses, the application of the rules in a clear and decisive manner, and training methods appropriate for gifted students. Likewise, according to Aydın (2011) counselors recommend student-centered courses in order to decrease unwanted student behaviors. In the study conducted by Siyez (2009), classroom management and communication skills are at the forefront of the subjects teachers most need in in-service training on unwanted student behaviors.

According to the observations made in the classroom in the scope of the research, prevention in the beginning of the areas where teachers need in-service training comes from behavior management and creating a student-centered learning environment. In addition, teaching methods, management of the learning process and teacher-student interaction are areas of training need. The averages of the scores obtained from these areas are relatively high but remain moderate when assessed against the highest possible score. For this reason, it can be said that teachers need education in these areas.

When the results of the research on classroom management in Turkey are examined, it is seen that the teachers are inadequate in many dimensions of classroom management (Alkaş, 2010, Atıcı, 2003, Çetin, 2013, Demir, 2009, Özdemir, 2009, Sadık, 2006, Yüksel and Ergün, 2005). These inadequacies should be eliminated through in-service trainings. On the other hand, there are research findings that show that a significant proportion of teachers acquire proficiency in classroom management in the context of lessons they have learned from their own experience, in other words, they have tested their skills in classroom management through trial-and-error method (Türnüklü, 2000b). However, trial-and-error method is a form of inefficient learning that requires the most time, labor and material expenditure. For this reason, in-service training should be given in order to acquire the knowledge and skills necessary for fulfilling a profession (Şentürk and Oral, 2008).

The fact that all the students of this school are recognized as having gifted ability can cause more negative behaviors especially towards friends in the classroom. The need to be a leader in gifted students is pre-programmed, so the need for power is more intense and the need for power that cannot be met in classroom work can lead to negative behavior towards friends.

As a result of the research, a significant difference was found in the prevalence of undesirable student behaviors before and after the Teacher in-service training based on Glasser's choice theory, and the incidence of undesired student behaviors decreased after the teacher's education. Particularly, the decrease in behaviors of not obeying the rules, dealing with other things, asking irrelevant questions to the lesson, distracting, not doing homework, lying and leaving the classroom became more obvious. This is the result of the training given to the teachers, which can be said to be due to the work of the teachers in taking the responsibility of their behavior to the students. The decline in classroom behavior and damage to school property can also be interpreted as the fact that according to Glasser's theory, the need for belonging in the pupils has been met by their teachers. In addition, the incidence of unwanted behaviors in students has decreased at the end of the training due to the

fact that the need to ridicule with friends, fight with friends, disrespect Teachers, use slang, and deny their mistakes are not met in a healthy way. With the education given to the teachers, it is aimed to make the students take their psychological needs by taking responsibility for their belonging, power, entertainment and freedom and giving them their lessons, thus reducing unwanted behaviors in the students. According to this result obtained, it can be said that education reached its aim in a great extent.

Eşici (2007) states that bullying behavior in students can stem from the inability to meet the need for power in healthy ways. The incidence of disobedience to school uniforms other than free days, which may result from the inability to meet the need for freedom of the pupils, has been reduced. This can be interpreted as the fact that the students began to meet the need for freedom appropriately. Getting off the ground without getting permission from the students, which may arise from the fact that the students are not satisfied with the need for entertainment in the educational environment, can also be a sign of meeting their leisure needs in the educational environment. At the end of the training, there was no decrease in the incidence of only two undesirable behaviors. The lack of abuse of friends and late lectures may be due to the fact that students cannot easily change their habits and that Teachers find these behaviors more acceptable than other unwanted behaviors.

Similar results obtained from studies in literature. For example Williamson (1992) focused on five basic needs in choice theory of Glasser during group therapy with four adolescent girls having problems in relations and performance and results revealed positive behavior change, higher academic success and improvement in communication skills of students within the group. Flowers and Mabry (2001) conducted a study in a school where Glasser's theory based program was implemented in order to decrease discipline problems within the school and found meaningful decrease of discipline problems according to measurement and observations after the program. Also Kianipour and Hoseini (2012) conducted an experimental study which explored that after the training given to the teachers about the choice theory of Glasser, the positive effect of the teacher-student communication was reflected in the academic qualities. According to the results of the research conducted by Aydoğan and Gündoğdu (2015) on the effect of the responsibility program, it was seen that the students who showed unwanted behaviors such as not doing homework and communication problems with their friends before application had a significant decrease in their unwanted behavior after the application.

In addition, Bellici (2012) pointed out that there were significant differences in the levels of school attendance, school attendance, and social emotional learning skills of junior high school students participating in a curriculum structured by reality therapy based on the theory of Glasser. Responsibility in the work done by HaytaÖnal (2005); Özmen (2004) and Yalçın (2007) also found that the training programs implemented according to Glasser's choice theory were effective in the development of the identity of achievement.

In a literature review that aims to examine 17 research findings about the effectiveness of the reality therapy based interventions that were conducted in the sample of primary school and middle school students, Türkdoğan (2015) found that intervention programs improved the students' positive attitudes towards the school, disengagement from problem behaviors, increase in academic achievement, internal

locus of control, level of responsibility and that it is effective in development of positive self-concept and achievement identity.

Teachers who participated in the survey were told that the opinions about the subject of the applied education were "appropriate to the problems in hand", "useful for the adolescence period" and "general in the topic". As regards the content of the training, there are also Teachers who think that most of the Teachers are appropriate, that they should include more applications and should be more specific. The question concerning the use of educational proposals in the professional life seems to be Teachers who say that it is difficult to put into practice when most of the Teachers answer that they are usable and useful. While Education believes that most of the Teachers are useful about the benefit of preventing unwanted behaviors, some think it is partly beneficial. When asked about positive opinions about education, participant Teachers stated that some of them learned a different approach, some of them were helpful in changing their behaviors, and some of them were more confident in class. Negative opinions about education are very re-education; some students will not work; it is stated that the implementation is low and the training takes a long time.

A significant difference was found in the classroom management skills that the teachers used in the class both before and after Glasser's in-service training based on choice theory. The scores after the teacher training were higher than the pre-training scores; it can be said that the applied education developed the behaviors of the teachers as "Quality teacher-student interaction", "Creating a student-centered learning environment", "Creating a quality school environment" and "Preventive behavior management".

Similar results were obtained in the researches that investigated the effectiveness of the in-service training prepared according to the needs of the teachers. For example, Sadık (2006) investigated the effect of the training program on the strategies of the teachers to cope with the unwanted behaviors of the students, based on assertive discipline model. The results of the research conducted by five teachers in an elementary school showed that the teachers changed their coping strategies after the given training.

Kontaş (2009) investigated the effectiveness of in-service training programs in line with the needs about curriculum development of teachers in Science and Art Center. At the end of the two-week training and 12-week training, it was found that teachers' proficiency in program development increased significantly. Similarly, a study by Şahin (2012) examining the effectiveness of a training program on the identification of gifted students in elementary schools revealed that there was a significant difference between pre- and post-practice scores of the Teachers' knowledge test in the group to which the trial was applied.

Tortop (2014) conducted a study in order to examine the effectiveness of in-service training for gifted education, with volunteer 30 teachers working at schools in different cities of Turkey. In this in-service training, teachers have received theoretical and practical training in the academicians who study on gifted education. The research has been designed as a case-study research which is one of the qualitative research models. In the study, some data tools (scales, interview form and the documents) were utilized As a result of a one week in-service training, it has been determined that the teachers' perception of self-efficacy for scientific research mentorship and gifted education increased.

One of the limitations of this research was that a control group could not be established because the number of teachers in the school was not appropriate. For this reason, the research was carried out in one group. Such experimental patterns are defined as weak experimental patterns or pre-trial patterns (Büyüköztürk, 2014). This classification is due to the weak generalizability of the cause-and-effect relationship obtained from such studies. Since it is not possible to include a large number of individuals in the working group to represent the universe, only limited generalizations can be made from the findings obtained in these investigations.

Suggestions

Suggestions for implementation can be presented in the light of the results of this research. In pre-service education of all teachers, there should be enough information and applications about gifted students and trainings within special education. Teacher candidates who are educated in the faculty of education should gain experience before service and more importance should be given to implementation education. Also by in-service trainings, knowledge about the gifted students and qualifications of teachers should be increased (Kontaş, 2009; Şahin, 2012; Tortop, 2014). In-service training for teachers will be beneficial for the effective use of Glasser's student-centered classroom management approach in the education of gifted students. It would be useful to organize in-service training courses for teachers of gifted students to develop their professional knowledge and skills in line with their educational needs. The Ministry of National Education and the universities should cooperate more for in-service training of teachers, and the necessary training should be given by field specialist academicians. The enrichment activities carried out in the education of gifted students should be planned and implemented in accordance with the interests and abilities of the students, taking into account the individual differences of the students.

In the school and classroom environment, the rules that students should comply with can be created together with the students and written in a board. Support for all areas of development is needed to meet the needs of gifted students in both academic and socio-emotional field guidance services. In the face of unfavorable student behavior in the school and classroom environment, school management, guidance services and teachers should work together with parents to find solutions without penalty. It is necessary to establish a government policy based on the views of academics, teachers and all stakeholders working in the field on the training of gifted individuals.

Biodata of the Authors



Dr. Nisa Gökden KAYA, completed undergraduate education in Hacettepe University, Faculty of Education, Psychological Counseling and Guidance program in 1999. She graduated from Master of Science program of Psychological Counseling and Guidance in Middle East Technical University in 2007. She received doctorate degree from Gazi University in Special Education in 2016. Her research focuses on education of gifted students. She has worked as a counselor with gifted students in Yasemin Karakaya Science and Art Center between 2011-2013. She has been working as a counselor in several public schools for 17 years.

Affiliation: Nasreddin Hoca Primary School, Etimesgut – Ankara

E-mail: nisakay@gmail.com



Prof. Dr. Ayşegül ATAMAN, who is a pioneer in special education, graduated from Ankara University Special Education and School Psychology and Guidance departments in 1969. Between 1970-1984, she worked as research assistant at Ankara University. She completed the first doctoral dissertation about gifted students in Turkey, in 1976. She served as the Head of Department of Educational Sciences at the Gazi Education Faculty between 1984-1987 and was the founder of the Special Education Department in 1986. She studied at Columbia University as visitor scholar between 1987 and 1990. In 1992-1995 she served as the founder and director of the Institute of Educational Sciences at the Gazi University. She was also the Dean of Gazi Education Faculty between 1992-1995. She retired from Gazi University in 2013 and still a professor in Department of Special Education in The European University of Lefke. She has many books, articles and studies about gifted students.

Affiliation: The European University of Lefke, Department of Special Education.

E-mail: ayataman@gmail.com

References

- Abazaoglu, İ. (2014). Dünyada öğretmen yetiştirme programları ve öğretmenlere yönelik mesleki gelişim uygulamaları [Professional development practices and teacher education programs in the world]. *Turkish Studies*, 9 (5), 1-46.
- Alkaş, B. (2010). *İlköğretim öğrencileri arasındaki istenmeyen öğrenci davranışlarının incelenmesi* [The analysis of undesirable behaviors among primary school students]. (Unpublished Master's Thesis). Ankara University Graduate School of Educational Sciences, Ankara.
- Ataman, A. (2003). Sınıf içinde karşılaşılan davranış problemleri ve bunlara karşı geliştirilen önlemler [Behavior problems encountered in the classroom and measures against them]. Leyla Küçükahmet (Ed.), *Sınıf Yönetiminde Yeni Yaklaşımlar* içinde (s.185-204). Ankara: Nobel.
- Ataman, A. (2004). Üstün zekâlılar için ilköğretimde uygulanabilir bir model [A viable model for gifted children in elementary education]. I. *Türkiye üstün yetenekli çocuklar kongresi seçilmiş makaleler kitabı*, İstanbul: ÇocukVakfı.
- Ataman, A. (2005). Üstün zekâlı ve üstün yetenekli çocuklar [Gifted and talented children]. Ayşegül Ataman (Ed.), *Özel Eğitime Giriş* içinde (s.173-195). Ankara: Gündüz.
- Atıcı, M. (2003). İstenmeyen davranışlarla başa çıkmada Glasser'ın problem çözme yaklaşımının uygulanması [The Application of Glasser's Problem Solving Approach to Dealing with Misbehaviour]. *Eğitim ve Bilim*, 128 (28), 27-34.
- Aydın, A. (2010). *Sınıf yönetimi* [Classroom management]. Ankara: Pegem.
- Aydın, B. (2011). Rehber öğretmenlerin istenmeyen öğrenci davranışlarına ilişkin çözüm önerileri [Solution offers of counselors for unfavorable behaviors of students]. *e-Journal of New World Sciences Academy*, 6 (4), 2469-2481.
- Aydoğan, R., & Gündoğdu, K. (2015). İlkokul öğrencilerine yönelik hazırlanan bir sorumluluk programının yansımaları: Bir eylem araştırması [The reflections of a responsibility program prepared for primary school students: An action research]. *Eğitimde Kuram ve Uygulama*, 11(3), 1061-1088.
- Başar, H. (1999). *Sınıf Yönetimi* [Classroom management]. İstanbul: Milli Eğitim.

- Bellici, N. (2012). *Gerçeklik terapisiyle yapılandırılmış eğitim programının ortaokul öğrencilerinin okula bağlanma, okullarına devamlarının sağlanması, sosyal duygusal öğrenme beceri düzeylerine etkisi.* [The effects of training program, structured by reality therapy on secondary pupil's bonding and attendance to their schools and their learning skill levels]. (Unpublished Master's Thesis). OndokuzMayıs University Graduate School of Educational Sciences, Samsun.
- Best, J. W., & Kahn, J. V. (1998). *Research in Education*. Boston: Allyn and Bacon.
- Büyüköztürk, Ş. (2014). *Deneysel desenler: Öntest-sontest kontrol gruplu desen ve SPSS uygulamalı veri analizi* [Experimental design: Pre-post-posttest control group pattern and SPSS applied data analysis]. Ankara: Pegem.
- Çetin, B. (2013). Sınıfta istenmeyen öğrenci davranışlarıyla ilgili sınıf öğretmenlerinin karşılaştıkları sorunlar ve çözüm önerileri. [Problems that Class Teachers Faced in the Classroom Related to Undesired Behaviors and Their Solutions]. *Kırşehir Eğitim Fakültesi Dergisi*, 14 (1), 255-269.
- Dağlıoğlu, H. . (2010). Üstün yetenekli çocukların eğitiminde öğretmen yeterlikleri ve özellikleri [Proficiency and Characteristics Of Teachers In The Education Of Gifted Children]. *Milli Eğitim Dergisi*, 186(72-84).
- Danaoğlu, G. (2009). *Sınıf ve branş öğretmenlerinin ilköğretim 5. sınıflarda karşılaştıkları istenmeyen davranışlar ve bu davranışlarla baş etme stratejileri* [Students' misbehaviors and investigating tackling strategies of primary teachers and branch teachers in fifth classes of primary education]. (Unpublished Master's Thesis). Çukurova University Graduate School of Social Sciences, Adana.
- Demir, F. (2013). *Ortaokullarda öğrencilerin disiplinsiz davranışları ve bu davranışların sebepleri (Batman İli Merkez İlçesi Örneği)*. [The students undisciplined behaviors and causes of this behaviors in the secondary schools]. (Unpublished Master's Thesis). İnönü University Graduate School of Educational Sciences, Malatya.
- Demirel, Ö. (2008). *Kuramdan uygulamaya eğitimde program geliştirme* [Curriculum development from theory to practice]. Ankara: Pegem.
- Demirhan, E., Kaya Uyanık, G., CananGüngören, O. &GürErdoğan, D. (2016). An examination of pre-service classroom teaching programs in terms of gifted education in Turkey. *Journal for the Education of Gifted Young Scientists*, 4(2), 15-28. DOI: <http://dx.doi.org/10.17478/JEGYS.2016221898>
- Eşici, H. (2007). *İlköğretim Yedinci Sınıf Öğrencilerinin Temel İhtiyaçlarının Karşılama Düzeyi İle Zorbacı Davranışları Arasındaki İlişki*. [The relationship between the secondary school seventh grade students? level of fulfilling their basic psychological needs and the bullying behaviour]. (Unpublished Master's Thesis). Gazi University Graduate School of Educational Sciences, Ankara.
- Flowers, B. N., & Mabry, N. K. (2001). *A new team approach to teaching responsible behaviour*, Georgia Southern College, Statesboro, Georgia 30458.
- Glasser, W. (1999a). *Başarısızlığın Olmadığı Okul*. [Schools without failure]. (K. Teksöz, Çev.). İstanbul: Beyaz.
- Glasser, W. (1999b). *Okulda Kaliteli Eğitim* [The Quality School]. (U. Kaplan, Çev.). İstanbul: Beyaz.
- Glasser, W. (2003). *Kişisel Özgürlüğün Psikolojisi (Seçim Teorisi)* [Choice Theory: A New Psychology of Personal Freedom]. (M. İzmirli, Çev.). İstanbul: Hayat.
- HaytaÖnal, Ş. (2005). *Bir sorumluluk eğitim programının lise dokuzuncu sınıf öğrencilerinin sorumluluk düzeylerine etkisi*. [The Effect of responsibility programme on to ninth class high school students]. (Unpublished Master's Thesis). Uludağ University Graduate School of Social Sciences, Bursa.
- İlgar, L. (2007). *İlköğretim öğretmenlerinin sınıf yönetimi becerileri üzerine araştırma*. [A research classroom management skills of primary school teachers]. (Unpublished doctoral dissertation). İstanbul University Graduate School of Social Sciences, İstanbul.
- İnci, G. (2014). *Üstün yetenekli öğrencilerin sınıf içi davranış sorunlarının belirlenmesi ve çözüm önerileri*. [Identification of gifted and talented students' behavior problems in the classroom and solutions]. (Unpublished Master's Thesis). Sakarya University Graduate School of Educational Sciences, Sakarya.

- Karasar, N. (2002). *Bilimsel araştırma yöntemi. [Scientific research method]*. Ankara: Nobel.
- Kaya, N. G. (2013). Üstün yetenekli öğrencilerin eğitimi ve BİLSEM'ler. [Education of Gifted Students and BILSEM's]. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 15 (1), 115-122.
- Kaya, N. G., & Ataman, A. (2017). Üstün Yetenekli Öğrencilerin İstenmeyen Davranışlarına Yönelik Öğretmenlerin Eğitim İhtiyaçlarının Belirlenmesi. [The Identification of Teacher Training Needs Towards Gifted Students' Unwanted Behaviors]. International Conference on the Talented and Gifted, Gazi University, Ankara.
- Kıldan, O. A. (2008). *Yapılandırmacı yaklaşıma göre okul öncesi öğretmenlerine verilen hizmetiçi eğitimin öğretmen – çocuk ve öğretmen – ebeveyn ilişkilerine etkisi. [The effects of in-service training practices for preschool teachers in line with the constructivist approach on teacher-child and teacher-parent relationships]*. Unpublished doctoral dissertation, Gazi University Graduate School of Educational Sciences, Ankara.
- Kianipour, O. & Hoseini, B. (2012). Effectiveness of training the choice theory of Glasser to teachers on improvement of students' academic qualification. *Journal of Educational and Instructional Studies in the World*, 2 (2), 117- 123.
- Kontaş, H. (2009). *Bilsem öğretmenlerinin program geliştirme ihtiyaçlarına ilişkin geliştirilen programın etkililiği [The effectiveness of the in-service training program developed on the basis of the needs of the teachers of science and art centers in the area of curriculum development]*. Unpublished doctoral dissertation, Hacettepe University Graduate School of Social Sciences, Ankara.
- Küçükahmet, L. (1997). *Eğitim programları ve öğretim. [Curriculum and Instruction]*. Ankara: Gazi.
- Maker, C.J., & Nielson, A.B. (1996). *Curriculum development and teaching strategies for gifted learners*. Austin, TX: Pro-Ed.
- Özbay, Y. & Palancı, M. (2011). Üstün yetenekli çocuk ve ergenlerin psikososyal özellikleri/ Psychosocial characteristics of gifted children and adolescents]. *Sakarya Üniversitesi Eğitim Fakültesi Dergisi*, 89-108.
- Özdayı, N. (2004). Öğrenci ve öğretmenlerin gözüyle sınıf yönetimi sorunlarına genel bir bakış [An overview of students and teachers' classroom management problems visually]. XII. *Eğitim Bilimleri Kongresi Bildiriler*, Ankara: Gazi University.
- Özdemir, T. (2009). *İstenmeyen öğrenci davranışlarının görülme sıklığı ile öğretmenlerin tükenmişlik düzeyleri arasındaki ilişki [The relationship between the undesired student behavior in the classroom and teachers' level of burnout]*. (Unpublished doctoral dissertation). Abant İzzet Baysal University Graduate School of Social Sciences, Bolu.
- Özmen, A. (2004). *Seçim kuramına ve gerçeklik terapisine dayalı öfkeyle başa çıkma eğitim programının etkisi [The impact of coping with anger training program based on choice theory and reality therapy and encounter group experience on students skills in coping with anger]*. (Unpublished doctoral dissertation). Ankara University Graduate School of Educational Sciences, Ankara.
- Renzulli, J. S. (1990). "Torturing data until they confess." An analysis of the three-ring conception of giftedness. *Journal for the Education of the Gifted*, 13, 309–321.
- Renzulli, J. S. & Reis, S. M. (1994). Research related to the School wide Enrichment Model. *Gifted Child Quarterly*, 38, 2-14.
- Sadık, F. (2006). *Öğrencilerin istenmeyen davranışları ve bu davranışlarla baş edilme stratejilerinin öğretmen, öğrenci ve veli görüşlerine göre incelenmesi ve güvengen disiplin modeli temele alınarak uygulanan eğitim programının öğretmenlerin baş etme stratejilerine etkisi [The Investigation of students' misbehaviors and strategies to cope with misbehaviors according to teachers', students and parents' perspectives and the effects of assertive discipline model based training program on teachers' discipline strategies]*. (Unpublished doctoral dissertation). Çukurova University Graduate School of Social Sciences, Adana.
- Sezer, Ş. (2015). Üstün yeteneklilerin sınıf içindeki olumsuz davranışları ve yönetilmesine ilişkin öğretmen görüşleri [Teacher opinion related to disruptive behaviors of gifted students in classroom and managing them]. *Uluslar arası Türk Eğitim Bilimleri Dergisi*, 3(4), 317-333.
- Siyez, D. M. (2009). Liselerde görev yapan öğretmenlerin istenmeyen öğrenci davranışlarına yönelik algıları ve tepkileri [High School Teachers' Perceptions of and Reactions towards the Unwanted Student Behaviors]. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 1(25), 67-80.

- Şahin, F. (2012). *Sınıf öğretmenlerine üstün yetenekli öğrenciler ve özellikleri hakkında bilgi düzeylerini artırmaya yönelik verilen bir eğitim programının etkililiği*. [The effectiveness of training programme for elementary teachers in order to enhance knowledge level about talented students and characteristics of talented students]. (Unpublished doctoral dissertation) Ankara University Graduate School of Educational Sciences, Ankara.
- Şentürk, H., & Oral, B. (2008). Türkiye’de sınıf yönetimi ile ilgili yapılan bazı araştırmaların değerlendirilmesi. [An assessment of some of classroom management studies in Turkey]. *Elektronik Sosyal Bilimler Dergisi*, 7 (26), 2-13.
- Tannenbaum, A. J. (2003). The meaning and making of giftedness. Nicholas Colangelo & Gary A. Davis (Eds.). In *Handbook of gifted education* (p. 45-59). Boston: Allyn & Bacon.
- Taymaz, H. (1997). *Hizmet içi eğitim*. [In-Service training]. Ankara: Sevinç.
- Tortop, H. S. (2014). Examining the effectiveness of the in-service training program for the education of the academically gifted students in Turkey: A case study. *Journal for the Education of the Young Scientist and Giftedness*, 2(2), 67-86. DOI: <http://dx.doi.org/10.17478/JEYSG.201429023>.
- Türkdoğan, T. (2015). Gerçeklik terapisi temelli müdahalelerin okullardaki etkililiği: İlkokul ve ortaokul öğrencilerine yönelik bir inceleme. [The Effectiveness of Reality Therapy Based Interventions in Schools: An Examination about the Primary School and Middle School Students]. *Ege Eğitim Dergisi*, 1 (16), 81-105.
- Türnüklü, A. (2000a). Sınıf içi davranış yönetimi. [Classroom behavior management]. *Kuram ve Uygulamada Eğitim Yönetimi*, 6 (21), 141-152.
- Türnüklü, A. (2000b). Türk ve İngiliz ilköğretim öğretmenlerinin sınıf içi davranış yönetim stratejilerinin karşılaştırılması. [Comparison of classroom behavior management strategies of Turkish and English primary school teachers]. *Kuram ve Uygulamada Eğitim Yönetimi*, 6 (23), 449-466.
- Williamson, R. (1992). Using reality therapy to raise self-esteem of four adolescent girls. *Journal of Reality Therapy*, 11(2),3-11.
- Wubbolding, R. E. (2015). *Gerçeklik Terapisi* [Reality Therapy]. (E. E. Öksüz, Çev.). İstanbul: Okuyan us.
- Yalçın, A. F. (2007). *Başarı kimliği geliştirme programının etkililiği* [The examination of the effectiveness of success identity development program]. (Unpublished doctoral dissertation). Hacettepe University Graduate School of Social Sciences, Ankara.
- Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri* [Qualitative Research Methods in Social Sciences]. Ankara: Seçkin.
- Yüksel, A. (2013). *Sınıf öğretmenlerinin sınıf yönetimi becerilerinin değerlendirilmesi (Afyonkarahisar ili örneği)* [The assessment on classroom management skills of primary school teachers: A case study of Afyonkarahisar]. (Unpublished doctoral dissertation). Gazi University Graduate School of Educational Sciences, Ankara.
- Yüksel, A., & Ergün, M. (2005). Sınıfta istenmeyen öğrenci davranışları ve çözüm yolları [Unwanted student behaviors and ways of solution in the class]. *Yaşadıkça Eğitim*, 88, 11-16.
- Zeidner, M., & Schleyer, E. J. (1999). The big-fish-little-pond effect for academic self-concept, test anxiety, and school grades in gifted children. *Educational Psychology*, 24, 305-329.