



## Use of Personal and Social Responsibility Model in Bringing Responsibility Behaviors: Sample of TVF Sports High School \*

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### Abstract

The objective of this study was to determine the effect of the Teaching Personal and Social Responsibility (TPSR) model upon bringing responsibility behaviors in students via physical activities and to examine whether students take their responsibility behaviors outside the gym or not. The study group consisted of 55 students receiving education in the 10<sup>th</sup> grade of Ankara Turkish Volleyball Federation (TVF) Sports High School. In the study, mixed methods pattern with embedded quasi-experimental pretest-posttest control group was used. While the students in the experimental group applied the TPSR program for 32 hours, the students in the control group continued the present curriculum. For the results; in the analysis of quantitative data, the descriptive statistics obtained from the Personal and Social Responsibility Scale and the One-Way Covariance Analysis (ANCOVA), and the percentage analysis obtained from the student behavior assessment rubric were used. In the analysis of qualitative data, content analysis method was used for reflection time assessment form and semi-structured individual interviews. The results of ANCOVA and percentage analysis showed that there were significant differences between the total scores of the experimental group and the control group; posttest and retention test scores significantly increased in students in the experimental group and decreased in students in the control group. As a result of the content analysis, the data acquired from the reflection time form and interviews presented some evidences concerning the responsibility behaviors. It was determined that parent cooperation had positive contributions to taking responsibility behaviors outside the gym and encouraging them. As a consequence, the TPSR model of 32 hours was effective upon bringing responsibility behaviors in Sport High School students.

### Keywords

Responsibility  
Personal responsibility  
Social responsibility  
Personal and Social  
Responsibility Model  
Physical education and sport

### Article Info

Received: 04.05.2017  
Accepted: 03.14.2019  
Online Published: 05.21.2019

DOI: 10.15390/EB.2019.7238

\* This article is derived from Bijen Filiz's PhD dissertation entitled "The use of personal and social responsibility model upon bringing responsibility behaviors: TVF Sport High School case", conducted under the supervision of Gıyasettin Demirhan.

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## Introduction

In some resources, responsibility is embraced as a value, personality trait and an attitude. Chamberlin and Chambers (1994) define responsibility as an individual who behave responsibly and can assume their responsibilities. Başaran (2000) defines responsibility as a sense of doing a job that is given or taken as a task to the end at all costs and giving an account of it when necessary. Gaining responsibility behavior begins to be acquired with family education at child ages and individual's approach or family's attitude affects acquiring responsibility behaviors either positively or negatively. Ginott (2009) states that responsibility develops in individuals together with attitudes and skills in family during childhood and it is learned by experience; on the other hand, children who escape from the facts of life and are constantly criticized will not be able to acquire responsibility behavior. Cüceloğlu (1999) indicates that individuals will not develop a sense of responsibility unless they are given the opportunity of making a choice for themselves and taking the responsibility of its results in their environment and thus, children will not grow mature in families that do not allow their children to express and apply their opinions.

In educational environments, teachers are responsible for bringing responsibility behaviors in students. However, it is not easy to bring these behaviors. Considering from this point of view, sense of responsibility does not develop automatically and there is a need for taking some precautions in order to raise children more responsibly (Jenkins, 1994). For this purpose, it is important that teachers should arrange the educational environments for students in order to be useful and mature people, to fulfill their responsibilities, to have high social skill levels, and to be happy people. In this context, teachers must provided opportunities for students to exhibit behaviors such as taking responsibility, sharing, helping, performing tasks, and coaching. Lickona (2009) stresses that responsibility (value) education is among the most important school subjects because value education will make important contributions to the identity development of individuals as long as it is performed for developing the personal and social responsibility levels of individuals. It is believed that every school curriculum needs to have personal and social responsibility education in order for students to develop successful identities. Thus, considering the insufficiency of exam-centered education at schools that foregrounds content acquisition in terms of developing a successful identity, there is a need for new approaches so that responsibility behaviors will be brought in students.

Positive Youth Development (PYD) is one of the new approaches aiming to support the positive development of young people by providing them with the difficulties which they may face. In the early 2000s, PYD emerged in the United States when the concept of positive psychology was intensively investigated (Lerner, 2005, p. 13). The PYD programs help young people to protect themselves from risky behaviors such as substance abuse and violence also support the positive role transformations like acquiring profession (Lerner, 2005, p. 19). In the 19 out of 161 youth development programs in which Catalano, Berglund, Ryan, Lonczak, and Hawkins (2004) made were seen that positive changed in youth behavior, skills, peers and adults in the relationship, personal control, problem solving, cognitive competencies, self-usefulness, school attendance, and increased achievement. In 24 programs, it was found that there were improvements in negative behaviors such as alcohol and drug use, lack of school absenteeism, aggressive behavior, tendency to violence, and smoking. As being one of these programs, Hellison's (1995) Personal and Social Responsibility Model (TPSR) is a rooted approach that uses physical activity for motivating children and youth for a positive youth development.

The general objective of TPSR is to make the values part of their belief systems in order to internalize the participant's personal and social responsibility values, and later transfer these values from the gym to the class, to their home, and to their community (Hellison & Walsh, 2002). An effective model of liability model involving physical activity includes the following levels (Hellison, 1995):

1. Respect the rights and feelings of others (e.g. self-control, right to be involved, right to encourage peaceful settlement of conflicts)
2. Effort/Participation (e.g. self-motivation, discovering new tasks, persistence)
3. Self direction (e.g. independency in duty, resistance to peer pressure)
4. Helping others/leadership (e.g. caring, empathy, sensitivity)
5. Transfer outside the gym (transferring the acquired values out of the program)

Respect for the rights and feelings of others which is at the first two levels is described as the early periods of liability. These two levels need to be considered as the first period of the liability for launching the program (Hellison, 2011). The third and fourth levels of self-direction and helping others/leadership are high levels of responsibility. At these levels, students are expected to work more independently and collaboratively by creating a positive learning environment. The fifth level involves the discussion and implementation of the "outside the gym" of the first four levels. These five levels are "to provide specific objectives for the authorization of the student" (Hellison, 2014).

The results of some foreign-resource studies on the TPSR applications which aim to bring personal and social responsibility behaviors in students show that students respect the rights and feelings of other people, regard team work (Dunn, 2012), develop to respect, effort, goal setting and leadership behaviors (Walsh, Veri, & Scobie, 2012), reduction in behavior related to winning, rough play, contact fouls and poor sportsmanship (Cecchini, Montero, Alonso, Izquierdo, & Contreras, 2007), and increasingly develop the values of helping and respecting each other (Lee & Martinek, 2009); however, no hopeful results are observed especially in self-direction (Jung & Wright, 2012) and helping others in terms of working less (Martinek, Schilling, & Johnson, 2001). In a large spectrum, it is seen that studies on TPSR being conducted in the USA, Spain and New Zealand, in the least, provide some evidences to the efficiency of the model in various contexts of physical activity, especially for personal and social responsibility development of primary and secondary school students (e.g. Cecchini et al., 2007; Escarti, Gutiérrez, Pascual, & Llopis, 2010a; Gordon, 2010; Hellison & Martinek, 2006; Hellison & Walsh, 2002; Hemphill, Templin, & Wright, 2015; Lee & Martinek, 2012; Martinek, 2012; Pascual et al., 2011; Sanchez-Alcaraz, Marmol, Valero, & De la Cruz., 2013; Walsh, 2008).

In Turkey, there are a limited number of studies on TPSR, one of which was conducted by Bulca (2013) and the study concluded that the model was effective on the change of self-sufficiency and responsibility. Keske (2015) stated that students made progress in selected fair play behaviors at the end of the model application process. It is considered essential to bring responsibility behaviors in individuals, and thus, actively apply such an important model with positive outcomes in physical education and sport programs in our country for positive identity development of students. In this context, the limited number of studies on the use of TPSR for bringing responsibility behaviors in students in the field of physical education and sport in Turkey played an important role in selecting this subject in the study. TPSR is included in the curriculum of Physical Education and Sports lesson in Turkey; however, the implementation of the model is not known by the teachers, so it is not applied in the lessons. With the results of the study which was obtained from the study to implement TPSR in the schools, it is thought that the arranging seminars for physical education teachers and model should be expanded in Turkey.

In this present study, the effectiveness of the model was examined on athlete students. All students in TVF (Turkish Volleyball Federation) Sports High School which constituted the study group of the research take part as athletes in various sports clubs. Athlete students are expected to be disciplined, regular, responsible, patient, attended, goal-oriented, aware of sense of mission and

endowed with sports culture in order to be able to show their outstanding success in their branches. When viewed from these aspects, it is considered important that the students in TVF Sports High School show the liability behaviors stated in TPSR (respecting the rights and feelings of others, effort/participation, self-direction, helping others/leadership) in and out of the sports hall, establish a positive athlete identity, and show sporty success. With the TPSR program, it is expected that athletes will develop their responsibility behaviors. Moreover, it is thought that the program will attract attention by the people and institutions required in terms of gaining behavior in related sports environments. In this present study, it is believed that parent cooperation will make important contributions to increasing the permanence of behavior and taking it outside of the sports hall as a new approach by allowing parents to support and follow responsibility behaviors that are brought in students at the sports hall. In this context, parent cooperation was provided during the experimental process.

The general aim of the research was to determine the influence of TPSR on developing the responsibility behaviors for athlete students through physical education and sports. When examining the effectiveness of the model, it was determined whether students transferred their responsibility behaviors outside the gym. The effects of the model on permanence and the effect of parent cooperation on gaining responsibility behaviors were also examined. The sub-problems of the research was as follows:

1. Is there a significant difference between the pretest and posttest scores related to the responsibility behaviors of the experiment group and control group?
2. Is there a significant difference between the posttest and retention test scores of the experimental group and the control group related to the responsibility behavior?
3. What are the opinions of the students in the experimental group about their responsibility behaviors?
4. What is the evidence of the students in the experimental group regarding whether they have transferred their achievements outside the gym related to the responsibility behavior?

## Method

### *Study Model*

This study was conducted using an embedded semi-experimental mixed methods design. According to the Creswell & Clark (2007), embedded design is one of the mixed method designs in which the qualitative method or quantitative methods stands out more than the other, the research is qualitative or quantitative research. However, it is needed that the data are obtained by the alternative method for supporting, generalizing, or explaining the data. A researcher can embed a qualitative data into a quantitative method as well as an experimental design or can embed quantitative data into a qualitative method as in a case design. Semi-experimental design with pretest-posttest control group was supported for the purpose of seeking answer to different kinds of research questions with the qualitative data collection process, it could not be answered with the quantitative method, by strengthening the study process and obtaining profound information throughout the experimental procedure. TPSR was applied to the students in the experimental group by the researcher throughout the experimental procedure and the present curriculum was sustained by the teacher in the control group. The research design is shown in Table 1.

**Table 1.** Research Design of the Study

Group	Pretest	Process	Posttest	Retention
Experiment	Q1	TPSR program	Q3	Q5
Control	Q2	Traditional practice	Q4	Q6

### Study Group

Being among purposeful sampling methods that require selecting individuals or cases which would give information about the research subject, the accessible case sampling method was selected (Yıldırım & Şimşek, 2006) and the study included 55 students studying in the 10<sup>th</sup> grade at Ankara TVF Sports High School on the voluntary basis in the fall term of the school year of 2015-2016. In selecting the grades, as the students from 10-A resided in Ankara, it was thought that parents could be accessed more easily for personal parent interviews and introduction of values education leaflets intended for informing families. Moreover, students living with their family were selected as the experimental group so that the parents could follow student behaviors and apply instructions throughout the experimental procedure. The students from 10-B came from other provinces and resided at students' hostel during a school year. While conducting the needs analysis, it was determined that five students from 10-A and four students from 10-B failed in displaying responsibility behaviors comprising TPSR (respecting the rights and feelings of others, effort/participation, self-direction, helping others/leadership) (Hellison, 2011). Also, 10-A was selected as the experimental group, while 10-B was selected as the control group.

Before starting the study, total pretest scores obtained from the Personal and Social Responsibility Scale (PSR-S) (Filiz & Demirhan, 2015) were compared for determining whether or not the groups were equal in terms of responsibility behaviors. It was determined that the experimental and control groups' total pretest scores obtained from the PSR-S were Skewness and Kurtosis coefficients in the range of -2 and +2, the data had a normal distribution, and analyses continued as follows (Tabachnick & Fidell, 2013).

**Table 2.** Variance Equation Test of Total Pretest Scores Obtained by Groups from the PSR-S before the Experimental Procedure

Scales	Levene Statistics	Sd1	Sd2	p
PSR-S	.454	1	53	.503

As is seen in Table 2, the significance value (Sig.) is above .05, which indicates that ( $p=.503$ ) variance values between the groups are equal (Pallant, 2001). This finding signifies that it is possible to conduct analyses for determining whether or not there is a significant difference between the groups on the basis of pretest values for the PSR-S.

**Table 3.** ANOVA Results regarding Pretest Values Obtained by Groups from the PSR-S before the Experimental Procedure

		Sum of squares	Sd	Mean of squares	F	P
PSR-S	Intergroup	.013	1	.013	.060	.808
	Intragroup	11.753	53	.222		
	Total	11.767	54			

ANOVA results [PSR-S  $F(1,53)=.060$ ,  $p>.05$ ] showed that the groups had similar qualities in terms of responsibility behavior scores. While the experimental group involved 28 students (17 girls, 11 boys), the control group involved 27 students (11 girls and 16 boys). Accordingly, among 55 students that constituted the study group, 50.7% of them were girls and 49.3% of them were boys. The students were in the age range of 15 and 16. The students in the experimental group had an age average of  $15.2\pm 1.3$ , whereas the age average of the students in the control group was  $15.2\pm 1.2$ . None of the students had participated in any TPSR applications before.

In the qualitative dimension of the study, 11 students (four girls and seven boys) were selected from the experimental group for personal student interviews according to the criterion sampling method, which is among purposeful sampling methods. This sampling method is based on studying all cases that meet a series of predetermined criterion. The researcher can either form the aforementioned criterion or use a present criterion list (Yıldırım & Şimşek, 2006). For needs analysis, the researcher collected information from the administrative staff, other teachers, peer groups and parents about the

students in the class for six months. It was also observed that students were also observed in the classroom environment and some notes were taken about which was intake deep knowledge about students. Students who were observed to display negative behaviors (like drinking alcohol, being absent from school, fighting, nicknaming, swearing, spoiling the work of others, avoiding to participate in studies, and going against peers) regarding responsibility behaviors specified in TPSR as a result of the needs analysis conducted by the researcher (Hellison, 1995, 2011). Personal parent interviews were carried out using the group of parents. A total of 11 parents were interviewed (eight women and three men). In the group of parents, all of them were married, one was an economist, one was a boxing trainer, two were freelancers, one was a civil servant, one was an apartment worker and, five were housewives.

### *Researcher Stance*

The researcher has been teaching in the school where she has been working for four years. Prior to the research, she worked as a Physical Education Teacher for six months in the classroom forming the experimental group and had a long-term interaction with the students. The fact that the researcher was provided enough time for collecting the data in this process contributed to the understanding of the culture and characteristics of the study group as well as developing in-depth understanding. Being in the same environment also created a friendly relationship based on a mutual trust. As a result of this, the researcher was able to get accurate and complete answers (Houser, 2013). Having spent some time in the field, through open-ended inquiries and active listening helped to understand how participants could create their own world (Creswell, 2013; Noddings, 2015). Having long interaction in the field also contributed to the establishment of closeness and mutual trust with the participants.

For this reason, individual interviews were carried out by the researcher who carried out the whole research so that the students and parents could express their thoughts and feelings more comfortably. The researcher was able to speak with the students by asking them questions and could take notes by walking around the area. The researcher took his notes after the studies in order to prevent the situations that would cause any question mark in the minds of the students during the studies. The open identity of the researcher and the interaction with the students by spending a long time in the field decreased the likelihood of avoiding exhibiting natural behavior with the idea that students were being monitored. Furthermore, the researcher gave feedback to the students throughout the study in order to realize the negative behaviors when students exhibited negative responsibility behaviors (swearing, nicknaming, not controlling anger, disrupting studies, making hand-wrists, and so on).

### *Data Collection Tools*

Table 4 shows the data collection tools used in the study.

**Table 4.** Data Collection Tools and Data Types Acquired within the Scope of the Study

<b>Sub-problems of the study</b>	<b>Data collection tool</b>	<b>Data type</b>
1. Is there a significant difference between the pretest and posttest scores related to the responsibility behaviors of the experiment group and control group?	- Personal and Social Responsibility Scale (PSR-S)	Quantitative
2. Is there a significant difference between the posttest and retention test scores of the experimental group and the control group related to the responsibility behavior?	- Personal and Social Responsibility Scale (PSR-S)	Quantitative
3. What are the opinions of the students in the experimental group about their responsibility behaviors?	- Semi-structured personal student interviews - Reflection time assessment form	Qualitative
4. What is the evidence of the students in the experimental group regarding whether they have transferred their achievements outside the gym related to the responsibility behavior?	- Semi-structured parent interview - Student behavior assessment rubric	Qualitative Quantitative

### ***The Personal and Social Responsibility Scale (PSR-S)***

The scale developed by Li, Wright, Rukavina, and Pickering (2008) was adapted to the Turkish language by Filiz and Demirhan (2015). The original language of the scale is English. Before the scale adaptation process permission for the adaptation of the original form was taken from Paul M. Wright by e-mail. In the original form of the scale, there are a total of 14 statements about the individual and social responsibility behaviors. Each statement related to the responsibility in the scale is scored between "Strongly Disagree (1)" - "Strongly Agree (6)" and, it is a 6-point Likert-type scale. The original form of the scale consists of two sub-scales: social responsibility and individual responsibility. Each sub-dimension has six items. The original English form of the scale was applied to 253 secondary school students between the ages of 9 and 15 years. As a result of two-factor analysis, the factor loads of each scale item were between .42 and .80. The correlation coefficient was .81, the correlation coefficient between the sub-scales was .64, the correlation coefficient of the individual responsibility sub-scale was .80, and the correlation coefficient of the social responsibility sub-scale was .79. Furthermore, according to the DFA results, it was reported that the fit index values were acceptable ( $X^2(76) = 147.93$ ,  $p < .0001$ ,  $RMSEA = .06$ ,  $NNFI = .92$ ,  $CFI = .93$ ], and the factor structure was consistent with the data collected (Li et al., 2008).

The scale adapted by Filiz and Demirhan (2015) was applied to a total of 460 high school students. The scale was collected in a single factor structure and it consisted of 13 items. The fit index values of the scale were calculated as  $X^2 = 188.36$ ,  $sd = 65$ ,  $IFI = .98$ ,  $CFI = .98$ ,  $NFI = .96$ ,  $NNFI = .97$ ,  $SRMR = .047$  and  $RMSEA = .095$ . The reliability coefficient was found to be .925 for the single factor structure. The results have showed that Turkish version of PSR-S is a valid and reliable measurement tool for determining responsibility behaviors of high school students.

### ***Semi-Structured Individual Student Interview***

A total of 11 students (four girls and seven boys) from the experimental group were selected for individual interviews according to the criterion sampling method, which is among purposeful sampling methods (the students who drinking alcohol, being absent from school, fighting, nicknaming, swearing, spoiling the work of others, avoiding to participate in studies, and going against peers). The students were interviewed twice and the interviews were completed totally in 15 hours. The interviews conducted by the researcher were carried out in the sports room of TVF Sports High School, and all interviews were recorded with a video camera. All the interviews were transcribed by the researcher into the word for word. According to the study objective and in the light of TPSR literature (Hellison, 1995, 2014); while the first interview questions prepared by the researcher were generally intended for knowing the students-collecting information regarding responsibility behaviors, the second interview questions were intended for learning how the students experienced the TPSR program applications and what they experienced, as well as what their opinions and evaluations were about the model. The analysis part of the study evaluated the data of the second interviews.

### ***Reflection Time Assessment Form***

At the end of each level, in other words, at the end of four classes in the process of experimental procedure, the students were asked to consider what they did regarding their own responsibility behaviors and they were allowed to reflect their thoughts and experiences in written form according to the study objective and in the light of TPSR literature (Hellison, 1995, 2014) within the compass of open-ended questions prepared by the researcher. The students were asked to spare approximately five minutes for each question and the forms were completed within totally 15 minutes.

### ***Semi-Structured Individual Parent Interview***

Parents of 11 students, who were individually interviewed as pretest before the experimental procedure and posttest after the procedure during the two-week process, were individually interviewed twice. Each of the interviews conducted by the researcher lasted approximately 50 minutes. Eight parents were not allowed to participate to the interview, while three parents attended to the interview and the interviews were recorded to the video. All the interviews were transcribed by the researcher into the word for word. The interviews were carried out in the sports room of the TVF Sports

High School. According to the study objective and in the light of TPSR literature (Hellison, 1995, 2014), while the first interview questions prepared by the researcher were generally intended for obtaining information from the parents about the responsibility behaviors of their children at home, the second interview questions were intended for determining how the students displayed responsibility behaviors in home environment after the TPSR application, whether or not these behaviors changed and how the parents evaluated the model. The analysis part of the study evaluated the data of the second interviews.

#### *Student Behavior Assessment Rubric*

Maths and Geography teachers of the school were asked to evaluate the responsibility behaviors of students from 10-A and 10-B so as to observe the responsibility behaviors comprising the TPSR levels in other course environments outside of the sports hall. Before the evaluations, the teachers were informed about the applications and levels of the model. The teachers evaluated each responsibility level in their classes once in two weeks and for totally eight weeks. During the evaluations, they rubricated between 0 and 4 as: never, rarely, sometimes, often and always. The evaluating teachers who were Mathematics and Geography teachers were the oldest teachers in the school. They worked at TVF Sports High School for six years since the foundation of the school. They had the opportunity to recognize the students in the study group by spending a lot of time in their class and after school courses. In this context, they had prior knowledge about the names, personal characteristics, attitudes, and general behaviors of students. Therefore, it was found appropriate for these teachers to evaluate students' individual and social responsibility behaviors during the experimental process.

#### *Data Collection Process*

Before the actual study, 28 students from the 10<sup>th</sup> grade at TVF Sports High School were informed about the study. Permissions were obtained for course applications on the basis of consent forms and a total of four courses and a curriculum that was prepared according to the TPSR were applied to the voluntary students. Then, in order to prepare the lesson plans to be used in the research, the contents and sample applications of various sources were examined (Hellison, 1978, 1985, 1995, 2014; Martinek & Hellison, 2009; Hellison & Cutforth, 2000; MacGregor, 2013; Orlick, 2006; Watson & Clocksin, 2013; West, 1999). As a result of the review a total of 16 experimental lesson plans for a two-week duration based on a collaborative approach and a game-oriented were prepared for the target behavior of each TPSR level. Experimental manipulations in the research are shown in Table 5.

**Table 5.** Experimental Manipulations in the Study

<b>Week</b>	<b>Level</b>	<b>Goal</b>	<b>Sub-goal</b>	<b>Activities</b>
1	1- Respecting the rights and feelings of others	Self-control, inclusion to the game	Respecting the right to participate, providing confidence to each other, communication	Acquaintance games Fusion games
2	1- Respecting the rights and feelings of others	Self-control, inclusion to the game	Finding logical solutions to problems, providing confidence to each other, communication	Acquaintance games Fusion games
3	1- Respecting the rights and feelings of others	Self-control	Finding logical solutions, trust, cooperation.	Fusion games
4	1- Respecting the rights and feelings of others	Self-control	Inclusion to the game, problem solving	Volleyball
5	2- Effort/ participant	Discovering the effort	Taking responsibility, motivation, self-responsibility	Fitness test
6	2- Effort/ participant	Trying new tasks	Effort, collaboration, strategy development, motivation	Games with pilates ball
7	2- Effort/ participant	Trying new tasks	Effort, collaboration, strategy development, motivation	Kinball

**Table 5.** Continued

Week	Level	Goal	Sub-goal	Activities
8	2- Effort/ participant	Trying new tasks	Effort, collaboration, strategy development, motivation, participant	Frizby
9	3- Self-direction	Independent study	Goal setting, self-development, focus, motivation	Sports games Yoga
10	3- Self-direction	Independent study	Goal setting, self responsibility, motivation, focus	Sports games Yoga
11	3- Self-direction	Independent study	Goal setting, focus, motivation	Station work
12	3- Self-direction	Self-motivation	Goal setting, self-responsibility	Fitness test 2
13	4- Helping others/leadership	Team building	Trust building, focus, motivation, trusting the leader	Team and trust building games
14	4- Helping others/leadership	Team work	Creative thinking, cooperation, self-expression, motivation, self- responsibility	Station work
15	4- Helping others/leadership	Team game Creating team spirit	Strategy development, leadership, communication, motivation	Football
16	4- Helping others/leadership	Cross-age education	Helping, self-confidence, focus, self-responsibility, problem solving, effort, communication	Preparing the dance show

Goals and acquisitions were determined for bringing the responsibility behaviors specified in the TPSR in students and the selected subjects were presented to the opinions of three experts (an academic member conducting academic studies on TPSR at Northern Illinois University-USA, a research assistant and a doctoral student) as an evaluation chart. From the first week onwards, it was aimed that the students would develop in the following behaviors: respecting the rights and feelings of others, effort/participation, self-direction, helping others/leadership. It was also aimed to express their thoughts and choices, make peer leadership, team building, team work, cooperation, making plan, developing strategy and problem solving skills while gaining these behaviors. In each course:

**In the relational time (5-7 minutes):** The researcher aimed to create trust among the students by asking questions such as how the day of the school was passed, whether or not there was something exciting or sad that day.

**In the awareness talk (7-10 minutes):** Brief information related to level and objective of the lesson of that day (e.g. level: leadership; objective: team building). Furthermore, asking questions to the students for encouraging them to think, create synergies and develop strategies such as who was the leader, what did you think about leadership, could you give a leader name, now who is the leader here, what behavior should be exhibited to be a team?... and so on.

**In the physical activity time (40 minutes):** The researcher firstly selected two captains for each course and according to the objectives of the course, she gave duties to captains such as carrying materials, creating teams, developing strategies, building trust and selecting games. In the first 10 minutes of the course, she played games for warming and made various movements to the students. In the next 10 minutes, drill-techniques related to the suitable sport chosen according to the objectives were practiced. In the last 20 minutes, she usually created the teams and played match for the selected sport. In some courses, she given the options to the students to select the games which was related to the objective and diversified the course according to their wishes.

**In the group meeting (10 minutes):** The following questions were asked to the students, what they learned about the course, which achievements they gained, how the course was going on, how the course might be different, whether they liked the lesson, where they could use the achievements gained in the school outside the school. Student who did not answer the questions was not forced.

**In the reflection time (15 minutes):** The students were asked to complete the reflective daily assessment form at the end of each course and the reflection time assessment form that was completed at the end of each of the four courses. A total of three questions were asked and five minutes were given for each question. Furthermore, it was used in the analysis of the data.

The study was conducted with 55 students from the 10<sup>th</sup> grade at Ankara TVF Sports High School of the Ministry of National Education in the fall term of the school year of 2015-2016 and it lasted for totally 13 weeks. Before the experimental procedure, the 10<sup>th</sup> grades (totally two classes) were informed about the study during the Sport courses and then they were given "Student Consent Forms For Explorative Study And Informed Consent Forms For Parents/Guardians". Then both classes were given PSR-S, which was adapted by the researcher, for the purpose of collecting the quantitative data for the pretest. The forms sent to the parents were read and signed by the parents and students and collected by the researcher in the following week. Moreover, personal interviews were conducted with 11 students in the experimental group and with their parents for two weeks. The parents were given "Values Education Leaflets Intended For Informing Families" before the preliminary interviews. In the booklet which was prepared by the researcher were included; information about responsibility behaviors (values) included in TPSR applications, instructions, practices for gaining values, and self-assessment questions for parents at the end of each value. During the pretest interviews, the parents were informed about the leaflets in detail and were asked to apply the instructions in the leaflets to their children throughout the experimental procedure, follow their responsibility behaviors and give positive feedback.

Two weeks after, the sport courses began to be taught in the experimental group according to the curriculum prepared in line with TPSR daily lesson format as two days a week, eight weeks, 16 courses and totally 32 hours. In this process, courses were continued in the control group according to the direct curriculum. Throughout the experimental procedure, the students in the experimental group were asked to evaluate their own responsibility behaviors every week. Furthermore, mathematics and geography teachers were asked to evaluate the responsibility behaviors of all students. At the end of the experimental procedure, PSR-S was applied to both groups for the purpose of collecting the quantitative data for the posttest. On the other hand, qualitative data were collected by conducting semi-structured personal interviews with the students in the experimental group and personal parent interviews with the same parents. PSR-S was applied for the last time to students in the experimental and control group for the purpose of testing the permanence one month after the study. Then the experimental procedure findings were reported.

Prior to the study, ethics committee approval from Hacettepe University Ethics Commission (23.12.2014 / 914) was received and all participants participated to the study voluntarily. The participants were informed about the content of the study and an approval form was signed. The participants were also informed that participation in the research would not affect the course notes and voluntary participation was taken as a basis. In order to ensure confidentiality, nicknames were used in the study. Necessary official permission was received from Ankara Governorship and Provincial Directorate of National Education.

### ***Data Analysis***

Quantitative data were analyzed using basic descriptive statistics of the PSR-S (Filiz & Demirhan, 2015). Pretest total scores of the experimental and the control group were compared using One-Way ANOVA. According to Tabachnick and Fidell (2013), it is appropriate to use covariance technique when no real random assignment can be made. In the context, One-Way ANCOVA was used in comparing the posttest scores of the PSR-S by checking the pretest scores and comparing the retention

test scores by checking the posttest scores. Percentage analyses were used in quantitative data instruments which were used in the experimental procedure.

Qualitative data, on the other hand, were analyzed following the method of Lincoln and Guba (1985) using content analysis. A 13-page print was taken from the data set consisting of reflection time assessment forms and a total of 515 (202 first questions, 154 second questions, and 159 third questions) coded units were obtained for four levels. The data set consisted of semi-structured interviews included 12-page printing and a total of 339 encoded units (185 students and 154 parents) were obtained. As a measure of internal reliability, consensus between two different researchers was calculated by marking the "consensus" or "disagreement" proposed by Miles and Huberman (1994). In the 100% of the data obtained from the reflection time assessment forms and 89% of the data obtained from the semi-structured interviews were provided the consensus. In accordance with the exchange of ideas regarding each data set, 100% consensus was reached.

The variation method was used for the validity and reliability of this study. In this method, the researcher can both observe and interview the participants, or use both qualitative and quantitative methods (Holloway & Wheeler, 2013). For methodological variation, information was collected from multiple data sources such as scale, observation, assessment forms, and individual students' and parents' interviews. More than one researcher-trainer was involved to the study for the researcher variation. Therefore, validity and reliability of all data were obtained by using three different methods of diversification.

## Results

This part involves qualitative and quantitative findings in such a way that the study questions will be answered respectively.

*Is there a significant difference between the pretest and posttest scores related to the responsibility behaviors of the experiment group and control group?*

After the study, the PSR-S was given to the experimental and the control group for the purpose of testing the personal and social responsibility of the students.

**Table 6.** Mean ( $\bar{X}$ ) and Standard Deviation (Sd) Values Regarding The One-Lower-Dimensional Structure of PSR-S

Dependent variables	Group	N	Pretest		Posttest	
			$\bar{X}$	Sd	$\bar{X}$	Sd
Responsibility behaviors	Experiment	28	5.24	.51	5.43	.49
	Control	27	5.21	.43	5.06	.36

According to Table 6, when the posttest scores of the students in the experimental and control groups were taken into consideration, it was seen that the responsibility scores of the experimental group who were taught by the PSR-S were higher than the control group scores which were not taught. It was observed that the posttest scores of the students in the control group decreased. According to the results of the analysis, it can be said that the TPSR applications have a positive effect on the development of students' responsibility.

**Table 7.** Results of ANCOVA Regarding the PSR-S.

Dependent variable	Group	Corrected means	Difference of means (I-J)	SE	F	p	eta <sup>2</sup>
Responsibility behaviors	Experiment (I)	5.43	.37	.12	10.13	.00*	.16
	Control (J)	5.06					

*P*<.05\*

According to Table 7, the mean difference between the posttest scores of the control group and the control group was found to be .37. As a result of the covariance analysis, when the pretest scores were controlled, it was found that there was a statistically significant difference between the PSR-S posttest scores in the dimension of responsibility behavior of the experimental and control groups. According to the classification of Kinnear and Gray (1999), it was observed that the effect factor in the experimental group was quite high in the dimension of responsibility behavior. Thus, it can be said that PSR-S posttest scores of the experimental group students were significantly higher than the posttest scores of the control group students and TPSR was effective in providing students with responsibility behaviors.

*Is there a significant difference between the posttest and retention test scores of the experimental group and the control group related to the responsibility behavior?*

One month after the study, the PSR-S was given once again to the experimental and the control group for the purpose of testing the permanence levels of the personal and social responsibility behaviors of students.

**Table 8.** Mean ( $\bar{X}$ ) and Standard Deviation (Sd) Values Regarding the One-Lower-Dimensional Structure of the PSR-S.

Dependent variables	Group	N	Posttest		Retention test	
			$\bar{X}$	Sd	$\bar{X}$	Sd
Responsibility behaviors	Experiment	28	5.43	.49	5.44	.53
	Control	27	5.06	.36	4.81	.62

When the retention test scores of the students in the experimental and control groups in Table 8 were taken into consideration, it was observed that the experimental group scores were higher than the control group scores. The retention test scores of the students in the control group decreased. This situation can be interpreted as the permanent effect of TPSR on the achievement of responsibility behaviors on students.

**Table 9.** Results of ANCOVA Regarding the PSRB-S

Dependent variable	Group	Corrected means	Difference of means (I-J)	SE	F	P*	eta <sup>2</sup>
Responsibility behaviors	Experiment (I)	5.43	.62	.11	16.30	.00	.24
	Control (J)	4.81					

$P < .05^*$

According to Table 9, the mean difference between the retention test scores of the experimental and control groups was found to be .62. As a result of the covariance analysis, when the post-test scores were checked, there was a statistically significant difference between the PSR-S retention test scores in the dimension of responsibility behavior of the experimental and control groups. According to the eta<sup>2</sup> values of Kinnear and Gray (1999), it can be said that the effect factor in the dimension of responsibility behavior of the experimental group was quite high. From this point of view, it can be said that the PSR-S retention scores of the experimental group students were significantly higher than the retention scores of the control group students, and the TPSR was effective in providing students with responsibility behaviors.

*What are the opinions of the students in the experimental group about their responsibility behaviors?*

Evidences about personal and social responsibility behaviors of students were obtained from semi-structured individual student interviews and responses to the reflection time assessment form.

### *Findings Regarding Semi-Structured Individual Student Interviews*

Semi-structured individual student interviews were conducted with 11 students (four girls and seven boys). The data obtained from individual student interviews as a result of content analysis are shown in Table 10.

**Table 10.** Themes Derived from Semi-Structured Individual Student Interviews and Sub-Themes

Themes	Sub Themes	f
1. Respecting the rights and feelings of others	Gaining awareness of respect	8
	Respect different views	7
	Self-control	8
	Communication	9
	Self-confidence development	6
2. Effort / participation	Effort	10
	Getting rid of prejudices	5
	Willingness to participate	8
	Trying new thing	9
3. Self- direction	Awareness of ability to do individual work	7
	Recognition of deficiencies	8
4. Helping others / leadership	Gaining awareness of helping others	8
	To gain awareness in leadership	9
	Leadership ability	6
	Request assistance	7
5. Responsibility behavior	To be aware of responsibility behavior	8
	Requesting responsibility	8
	Giving responsibility	6
	Encouraging responsibility	6

Students stated that they were able to comprehend the concept of respect at the end of the program, were more careful with their behaviors, respected different opinions of their friends, worked together with them, were more careful and respectful towards their friends, could manage their anger, and avoided fighting. Furthermore students stated that they had better relations with their friends, communicated and made peace with them, socialized better with them, had a better dialogue, terminated their estrangement, were happier, had a higher self-confidence, believed in success, were more confident in beginning to speak, were able to express themselves better in any environment and communicated with others more easily. *"I have acquired an awareness of respect; I used to directly tell my friends "What kind of clothe is that?" whenever they put on something and now I am more kind and avoid offending them. I am not like that anymore"* (Sıla). *We were unable to consider behaving respectfully before, but now we have become conscious. We used to tell negative things to our friends without ever considering whether they would be offended, but now we are more careful as this study has taught us how to press these issues"* (Birsen). *"I like being together with friends despite our different thoughts; we can do things together now. We did not go to matches and sit together before. We can make common decisions now"* (Gamze). *"I used to tell heartbreaking things to my friends. After the respect study, I have begun paying attention to my behaviors. Indeed, I can set an example for my juniors in the club in terms of anger management and respect"* (Sıla). *"My friends think that they will offend me as I am very emotional. I used to avoid talking to them or beginning to speak in the class. The program has allowed me to have self-confidence and speak more confidently. I am able to communicate and talk to my teachers without hesitation"* (Özlem).

In effort/participation studies, students stated, by means of this study, that they forced themselves to do things which they had not done before or had had a difficulty in doing, made an effort for the participate, recognized their friends without prejudice, tried to understand them, tried new things, used their imagination, tried things which they had refused to try as they had hated them before without prejudice and willingly participated in many applications which they had not liked before.

Regarding this, some of the students' comments are as follows: *"I refused to participate in practice courses due to my disability. In these studies, on the other hand, I have tried to participate in almost all games as they are fun"* (Ceren). *"I used to be prejudicial in the beginning. These studies have allowed me to have a few opinions about almost everything. I was timid before, but now I am able to tell what I know. We have seen new things and we should try them without prejudice"* (Ahmet).

In self-direction studies, students stated that they acquired the behaviors of working independently and setting goals, and tried to correct their deficiencies. Regarding this, some of the students' comments are as follows: *"I had never worked independently before the table work intended for overcoming our deficiencies in our branch. However, after doing it, I have begun telling myself "I should do this and that today", which I did not use to do. I think that I have improved myself on this subject"* (Sıla). *"My goals have not changed, but the program has allowed me to see that I can work independently. I have realized my deficiencies and tried to overcome them"* (Ahmet).

After the program, students stated that they realized the necessity of helping others and helped their teachers, friends, and families more, realized their leadership features and improved these features with the help of applications and learned how to demand help without anyone's offer. Regarding this, some of the students' comments are as follows: *"I used to help, but not this much. I have begun helping other people much more. I especially demand helping my teachers"* (Neşe). *"I always used to avoid leading. I like the little tasks of leadership you have given me and they have also encouraged me"* (Ceren). *"I do not expect help from others; I demand it. My mother used to ask me and now I do. I also ask my teachers directly"* (Özlem).

#### ***Findings Regarding The Reflection Time Assessment Form***

Students stated that they learned respect, effort, trust, tolerance, cooperation and salutation behaviors in the courses where they performed first degree applications, experienced various difficulties in applications intended for respecting the rights and feelings of others, and generated solutions to difficulties, such as developing a strategy, asking for help and offering an opinion. *"This week, I have learned that some of my friends are uncomfortable with my behaviors. I try to be more respectful towards them and inquire after the health of other people around me"* (Ahmet). *"I lost my nerve while preparing a banner and finding a slogan as a group. I did my best not to offend my team mate and we solved the problem by trying and finding common ideas"* (Seda).

Students stated that they learned respect, effort, anger management, innovation, adaptation and unity-solidarity behaviors in courses where they performed second degree applications, experienced some adaptation problems while playing new games, and generated solutions to problems, such as remaking, asking for help, speaking and developing a strategy. Regarding this, some of the students' comments are as follows: *"Unity and solidarity have been established hardly after repetitions in collective games with a greater attention"* (Müge). *"I had a difficulty in adapting to my friends, but then we could talk and solve it in the group gathering"* (Ceren).

Students stated that they learned self-direction, independent working, goal setting and leading behaviors in courses where they performed third degree applications, experienced problems about not being taken into consideration and compromising and generated solutions to problems, such as speaking, getting help, relaxing and speaking up. Regarding this, some of the students' comments are as follows: *"I have set new goals and thought about these goals this week. I have seen the importance of setting goals in life"* (Gamze). *"I used to have a trouble with guiding my friends in warm-up and being taken into consideration. I have solved this problem by raising my voice"* (Ceren).

Students stated that they learned leading, cooperation, responsibility-taking and confidence behaviors in the courses where they performed fourth degree applications, experienced some problems like mistrust and failure of finding direction, finding dance figures and performing the figures and generated solutions to problems, such as repeating, speaking, getting help, presenting an opinion and relaxing. Regarding this, some of the students' comments are as follows: *"I have learned how to trust another friend physically rather than emotionally"* (Hande). *"There were firstly two and then four and finally*

*eight people in the dance class this week. I had a great difficulty during this integration. Everyone had a different figure, but we revealed something very nice by successfully presenting our opinions” (Gamze).*

***What is the evidence of the students in the experimental group regarding whether they have transferred their achievements outside the gym related to the responsibility behavior?***

Evidences about whether or not students who participated in the program that was prepared according to the TPSR conveyed their acquisitions regarding personal and social responsibility behaviors outside the gym were obtained from the student behavior assessment rubric and responses to closed-ended questions in the semi-structured individual parent interviews.

#### ***Findings Regarding Semi-Structured Individual Parent Interviews***

Parents stated that the students began to comprehend the concept of respect at the end of the program, tried to be more respectful towards their friends and other people, were more careful with their behaviors, began to control themselves, expressed themselves more easily in an environment, communicated with others more easily and established close relations with their friends and families. Ceren’s mother stated; *“Thanks to the program, my kid who used to fail in keeping her temper now considers what she says twice and displays a calmer and more attentive attitude. As a matter of fact, she was polite and avoided cursing and evil tongue before the program. However, she was not so successful in anger management. She did not swear, but she talked without thinking. While we were discussing, I clearly observed that she was more aware of what she was talking about” (Fatma), and Birsen’s mother stated; “My kid used to be very shy, but she has become more self-confident since the program. I can see that she has a higher self-confidence, is aware of what she is doing and she also takes responsibility.” (Senem).*

In effort/participation studies, parents stated that the students forced themselves to do things which they had not done before or had a difficulty in doing and made an effort. Mesut’s mother stated: *“He tries to do his homework more regularly even if he does not like it. He used to be reluctant to do his homework. But he asks his friends now and tries to do it timely” (Damla), and Neşe’s mother stated: “I certainly think that she has improved. She is more attentive to her homework. I see that she makes an effort in her own way. She also participates in social activities like theatre” (İlayda).*

Parents stated that the students worked independently after the program, set goals for themselves and acted in a more determined way in line with their goals. Ali’s father stated: *“He had goals, which have become clearer as short, medium, and long term goals like playing volleyball in the team A” (Hakan). Ceren’s mother stated: “I think that she can work independently without certain self-control, because I always used to warn her about submitting her homework timely and check them. But she knows when to do her homework and according to which program right now” (Fatma).*

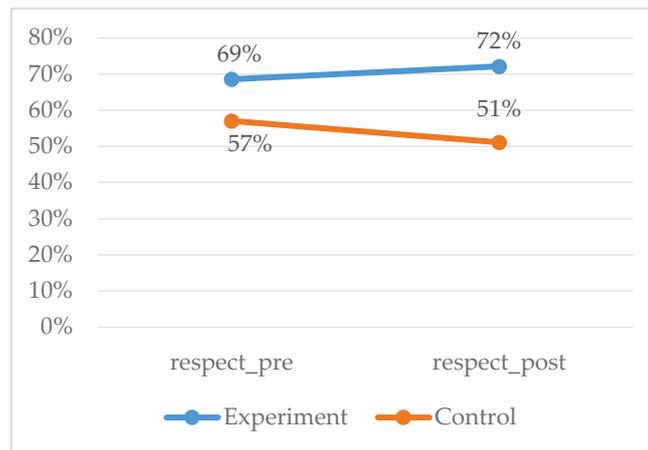
Parents stated that the students used to display leadership features, improved these features with the help of the program, became aware of leadership and, were able to lead the friends. Ceren’s mother stated: *“She used to regard leading as a responsibility; but now she wants to lead her younger cousins, warns them, makes them play, teaches them wrong behaviors within the games in an appropriate way and becomes a good role-model for them. My kid likes leading the most. She used to hate leadership, but now she has fun. I like this program very much. It has allowed my kid to take responsibility willingly, work independently and lead others” (Fatma).*

Parents stated that the students were aware of taking responsibility, increased the behavior of taking responsibility and enjoyed taking responsibility. They also indicated that they gave more responsibility to them in order to make them to gain responsibility behaviors. Birsen’s mother stated: *“I think that she has become more self-confident after the program. She seems to be aware of what she does and finally takes responsibility. Whenever I gave her a task, she used to neglect it. I would have to warn her for a few times. But now she does some things without my warning. She even asks if I need help” (Senem). Ceren’s mother stated: “I did not use to give her tasks like tidying up her room or helping me in the kitchen. But now I want to encourage her to do these things and indeed, I succeed it (training with leaflet)” (Fatma).*

### *Findings Regarding Student Behavior Assessment Rubric*

In order to observe whether or not students conveyed their acquisitions regarding responsibility behaviors in other course environments outside the gym, Maths and Geography teachers of the school were asked to evaluate the responsibility behaviors of students from 10-A (experimental group) and 10-B (control group). Percentage analyses were calculated as: pretest for the mean of the first two assessments of student behaviors and posttest for the mean of the last two assessments so as to see the development in the responsibility behaviors of students from the beginning until the end of the program.

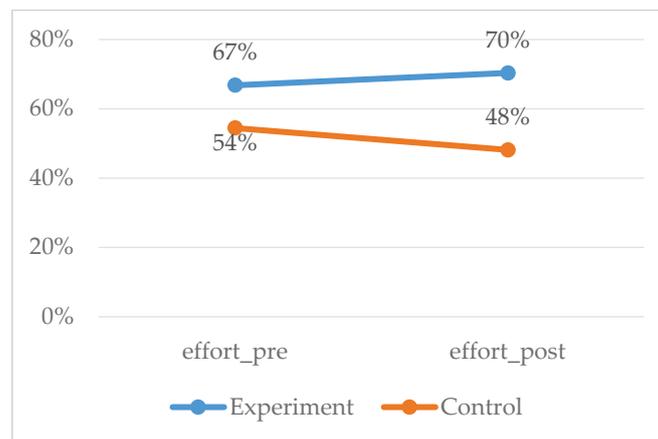
#### *Level 1: Respecting the Rights and Feelings of Others*



**Diagram 1.** Percentage Analysis of the Behavior of Respecting the Rights and Feelings of others

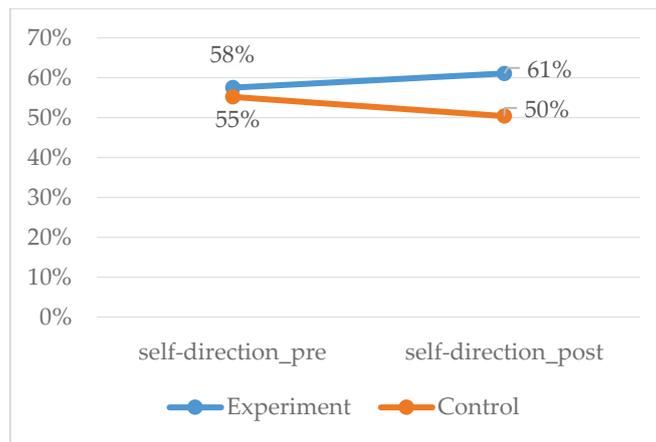
In Diagram 1, four-week evaluations of teachers show that there is a 3% increase in the respect behaviors of students in the experimental group and a 6% decrease in the respect behaviors of students in the control group.

#### *Level 2: Effort/Participation*

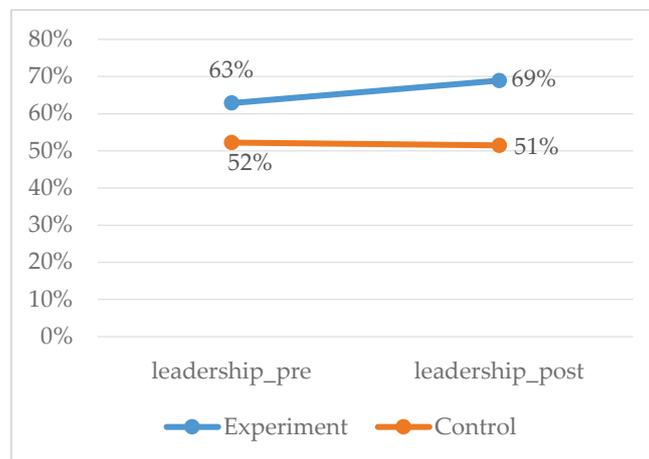


**Diagram 2.** Percentage Analysis of Effort/Participation Behaviors

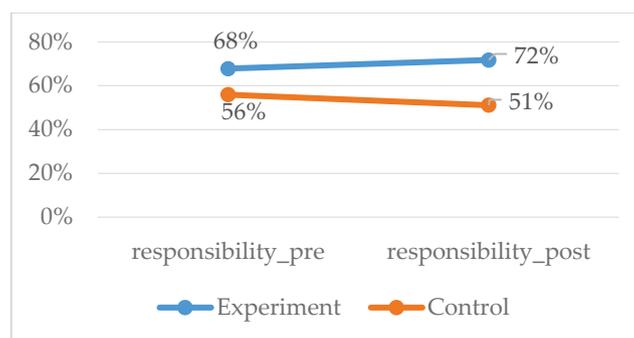
In Diagram 2, four-week evaluations of teachers show that there is a 3% increase in the effort/participation behaviors of students in the experimental group and a 6% decrease in the effort/participation behaviors of students in the control group.

**Level 3: Self-Direction****Diagram 3.** Percentage Analysis of Self-Direction

In Diagram 3, four-week evaluations of teachers show that there is a 3% increase in the self-direction behaviors of students in the experimental group and a 8% decrease in the self-direction behaviors of students in the control group.

**Level 4: Helping others/Leadership****Diagram 4.** Percentage Analysis of Helping others/Leadership Behaviors

In Diagram 4, four-week evaluations of teachers show that there is a 6% increase in the helping others/leadership behaviors of students in the experimental group and a 1% decrease in the helping others/leadership behaviors of students in the control group.

**Level 5: Transfer Outside the Gym****Diagram 5.** Percentage Analysis of Responsibility-Taking Behavior at the Outside the Gym

In Diagram 5, four-week evaluations of teachers show that there is a 4% increase in the responsibility-taking behaviors outside the gym of students in the experimental group and a 5% decrease in the responsibility-taking behaviors outside the gym of students in the control group.

### **Discussion, Conclusion and Suggestions**

In this study, it was aimed to determine the effect of the TPSR on gaining responsibility behaviors through physical education and sports and to determine whether students transferred their responsibility behaviors outside the gym. In this research, unlike the other studies, the retention of the results of the experimental application and the cooperation of the parents were examined. One of the most important results of the study was that the implementation of the TPSR program was supported by the cooperation of the parents and the increase in the effectiveness of the students in terms of the development of responsibility behaviors. A sense of responsibility is a skill that the child first learns and develops from his / her parents and then from his / her social environment (Gordon, 2010). The awareness of the responsibility of the individuals in the family continues at school. The school is responsible for correcting various shortcomings and inaccuracies from the family. However, in terms of social responsibility and self-confidence, schools are insufficient to teach how to achieve a successful identity (Nelson & Low, 2004). If the knowledge, skills and behaviors gained in the school are not supported and reinforced by the families at home, they are soon forgotten. More importantly, if there were differences in the behaviors which could be taught in the school and the values, habits and behavior-giving methods that the family attaches importance to, it is very difficult for a child to learn and implement what is taught in school easily. Teachers need parents 'support to improve students' responsibility behavior and school success (Gümüşeli, 2004). In this study, it was ensured that families supported by the values education booklet applied the behaviors that are taught in the school in the same way to their children and reinforce these behaviors. Therefore, in this study, it was determined that school-teacher-family cooperation reinforced the responsibility behaviors given to students and contributed to the retention of these behaviors.

As a result in the present research, it was observed that there was a significant increase in responsibility behaviors of the experimental group, on the other hand, there was no significant change in the scores of the control group which supported the significant differences between the groups in terms of posttest scores. Considering the fact that evidences about personal and social responsibility behaviors support significant developments and positive changes in acquiring responsibility behaviors, it may be suggested that the TPSR program makes a positive contribution to the students in the experimental group in terms of gaining and developing responsibility behaviors and It was detected in the current study that while the group receiving the TPSR education showed a development in eight weeks, the group without the TPSR education showed no development at all. In the study of Escarti et al. (2010a), it was determined that there was a significant increase in self-control sufficiencies of the students after the application of the TPSR program and the posttest scores of students in the experimental group were also significantly higher than the scores of students in the control group which showed a parallelism with the findings of this study. Sanchez-Alcaraz et al. (2013) stated in their study that male students in the pretest showed more responsibility behavior than girls. Moreover, it was observed that primary school students had higher responsibility behaviors compared to the secondary school students. In the posttest, it was determined that all responsibility behaviors of the students were developed. In other study, Escarti, Gutiérrez, Pascual and Marin (2010b) examined the development of personal and social responsibility levels and self-sufficiencies of students at the end of the TPSR application. The results of this study were consistent with the findings of the current study in order to see that there was an important development in self-efficacy of self-regulating learning and social resources for assignment in the experimental group.

As a result in the current research, it was observed that there was a significant increase in responsibility behaviors of the experimental group, on the other hand, there was no significant change in the scores of the control group which supported the significant differences between the groups in terms of retention test scores. There have been no studies conducted abroad on the permanence of the TPSR applications. The results obtained from this study apart from the other studies proved that the TPSR program continues the students' responsibility behaviors after its application.

The researcher observed that majority of students in this study were able to control themselves and respected each other more while following the rules of a game during activities. Students were able to control themselves more consistently especially by listening to other people rather than interrupting them which was the hardest part of respect to be applied. Besides, students displayed honest behaviors during the games, showed more respect toward game rules and finally played fairly with their friends. The findings of Cecchini et al. (2007), Walsh (2008), Walsh, Ozaeta, and Wright (2010) indicated that participants developed self-control and began behaving more respectfully toward other individuals in the proceeding periods of studies. For example, Walsh et al. (2010) examined the effect of a training club that adopted an TPSR frame on 13 primary school students. They determined great developments in self-control and respect toward peers in the school environment. These results are consistent with the current research findings of respect.

During the applications, it was observed that the students experienced some difficulties like maladaptation and insecurity, and generated solutions to these difficulties, such as developing a strategy, asking for help and offering an opinion. As a result of their study, Escarti et al. (2010b) determined that students showed an improvement in the skills of peacefully solving controversies with their classmates and developing empathy compared to their initial social behaviors which supported the results of this study.

Trying new things will expose individuals to experience things they would not try, so that they will be able to see whether they like it or not. For example, the students in the current study indicated that they had never played with kinball, frisbee and pilates ball. Even though these activities were new to the students, they liked them due to their never ending structure and difference from other games. As a result of their studies, Martinek et al. (2001), Walsh et al. (2010), Wright, Li, Ding, & Pickering (2010) and Dunn (2012) determined that students were eager to try new things which supported the results of this study. As a consequence, it may be suggested that majority of students developed their behaviors of participating in activities, trying to do their best, and trying new things. Otherwise, majority of students succeeded in comprehending and applying self-direction with the help of explanations that were made during the courses focusing on self-direction. As a result of their study, Martinek et al. (2001) determined that students made an effort for setting goals and had a little self-direction which supported the results of this study.

In the beginning of this study, students comprehended helping others and leadership usually as helping their peers and teachers during tasks. As the TPSR program progressed, more leadership features were revealed and some of the students had a further perception of leadership instead of a simple interpretation by the end of the study. All of the students stated that they acquired an awareness of helping others and leadership, and developed their leadership features by the end of the program. Parents also supported the students' opinions. In the study of Özlem, Sila, Neşe and Alper, it was observed that they demanded leading before the researcher told them to. Vygotsky (1980) stated that "Children begin to learn long before they go to school. Any learning encountered by children at school always has a background". It was thought that these students formed a confidence level before they participated in the program without the support of the researcher. The researcher gave these students a greater opportunity of leading.

It was aimed to teach the meaning of taking responsibility behaviors being learned outside of the sports hall. Even though the students displayed an irregular responsibility, they frequently asked for responsibility from the researcher. They seemed to be very enthusiastic about carrying the equipment, arranging the course areas, taking the roll, and carrying and turning on the camera. They directly expressed these demands and succeeded in fulfilling the required responsibility from the beginning to the end. The participants volunteered whenever there was a need in the studies and took their responsibility seriously. Sharing the responsibility allows individuals to play an active role in development (Benson, 1997; Vygotsky, 1980). Giving responsibility to students supports their autonomy, offers them the opportunity of taking responsibility (Eccles & Gootman, 2002) and encourages them to develop their learning skills (Bodrova & Leong, 2007). Thus, it is important for teachers to give developmentally appropriate responsibilities to their students for not only making them feel needed, but also offering them the opportunity of becoming responsible adults.

It was required to be a good observer and act quickly in order to respond to negative behaviors displayed by some of the students from time to time (for example, getting angry, telling encouraging things, and sparking debates that would represent more positive behaviors). A few TPSR studies touched upon irresponsible behaviors (such as uneasiness, disrespect, and dispute) in different ways. They used interruption techniques, created a speaking order, excluded the participants from the activity, made an agreement with the participants regarding their behaviors, guided them via modeling, gave clues to children, and gave feedback regarding their behaviors (Dunn, 2012; Escarti et al., 2010a; Hammond-Diedrich & Walsh, 2006; Hastie & Buchanan, 2000; Pascual et al., 2011; Wright & Burton, 2008). Some of the responses to irresponsible behaviors had a remarkable resemblance to the responses in this study. Behaviors were discussed at the end of every course in order for the students to understand and think about their behaviors. Other youth development studies emphasized the importance of establishing relationships with responsible adults and indicated that these relationships not only allowed individuals to avoid negative behaviors, but also presented important protective factors that would prevent risk factors and enable children to cope with difficulties (Anderson-Butcher, Cash, Saltzburg, Midle, & Pace, 2004; Coatsworth & Conroy, 2007). Students stated that their seniors encouraged them in displaying responsible behaviors, playing various games, giving homework and projects, controlling uniforms, asking them to bring equipment to the class, as well as warning and reminding the tasks. The researcher, on the other hand, provided the students some instruments required for displaying responsible behaviors and gave them the necessary feedback at the end of every course so that they could learn responsible behaviors.

According to the results regarding whether or not students were able to take responsibility behaviors outside the gym, the evaluations that were conducted by Geography and Maths teachers as a result of observing the students in the experimental group increased in all responsibility behaviors at the end of the program. Besides, the students' behaviors with the cooperation of parents were followed by the experimental process by parents and their feedback was provided. After the program the parents stated that the students displayed more responsibility behaviors in home-family environment. Moreover, majority of parents stated that existing responsibility behaviors of students were reinforced and partial responsibility behaviors improved at the end of the program. Evaluations of other teachers and opinions of parents coincide with students' statements and the findings show that students were able to take responsibility behaviors outside of the sports hall. The studies of Dunn (2012), Keske (2015) and Walsh et al. (2010) showed that the TPSR values were taken to the school environment, outside of school and sports hall which showed a parallelism with the results of the current study.

In the current research, the responsibility behaviors of the students were supported and followed in cooperation with parents outside the gym in real life. All these processes contributed to the procurement of permanence in personal and social responsibility behaviors of the students in the experimental group at the least. As students in the control group were not subjected to any procedures regarding responsibility behaviors, they did not experience processes like giving feedback, learning by experience, repeating responsibility behaviors, and following them outside the gym. There was no

development in responsibility behaviors, and effect of permanence since the skill learning was the focal point.

Due to the fact that the duration of the current research was eight weeks and 16 courses, three students did not get enough results, and some responsibility behaviors remained at the basic level. In fact, the length of the program was in the time frame interval of other TPSR studies which ranged between 5 and 36 weeks (Hellison, 2011). Nevertheless, in a study that lasted more than eight weeks, it is thought that the responsibility behaviors that remain at the basic level can be improved by taking care of these students individually and by spending more time. In this context, eight weeks of study is seen as a methodological limitation. This study was carried out on the 10<sup>th</sup> grade high school students. In this study, the effectiveness of the program was examined as a whole. Future studies can be planned in younger age groups, with a longer duration and different characteristics (self-efficacy, emotional intelligence, leadership, and so on).

In the present study, as a result of the TPSR program which was consisted of eight weeks, 16 courses and 32 hours', students' awareness of their personal and social responsibility behaviors was achieved. Furthermore, it was determined that responsibility behaviors developed, responsibility was transferred to other environments outside the gym, and the program had a permanent effect on the responsibility behaviors. Moreover, it was revealed that these behaviors were gained more effectively by the cooperation of parents. These results were supported with evidences about personal and social responsibility behaviors.

#### *Suggestions for the Use of Research Results*

- Plan studies that would also reveal the reasons of significant decreases in the responsibility scores of the control group that did not participate in the TPSR applications at the end of the program.
- A new TPSR program can be applied to three students who fail in creating awareness and making progress in responsibility behaviors throughout the program.
- Extend the Values Education Leaflets Intended for Informing Families, train families on values education and allow students to reinforce the responsibility behaviors acquired at school also in home environment.
- The TPSR program can be prepared on an annual basis and the development of students' responsibility behaviors can be followed annually.
- The behaviors that students do not show development in the experimental study can be determined and individual programs can be prepared to improve these behaviors.

#### *Suggestions for Future Studies*

- Emphasize an approach that would determine how students are encouraged to take their responsibility behaviors outside the gym in the TPSR applications.
- Conduct more comprehensive studies that would reveal to what extent the participants display responsibility behaviors in environments outside the gym (such as school, classroom, home, neighborhood, and training) in cooperation with shareholders like parents, trainers, teachers, neighbors and, peers.
- Conduct studies investigating the effect of the TPSR program on the sport and academic achievement of sport high school students in taking the responsibility behaviors acquired at the end of the program outside the gym.

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