



Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi Sayı: 10/1 2021 s. 304-320, TÜRKİYE

Araştırma Makalesi

EXAMINATION OF ADOLESCENTS' PROSOCIAL BEHAVIOUR TENDENCIES IN TERMS OF SOME VARIABLES: A CITY SAMPLE*

Samet ATA**

İsmihan Zeliha ARTAN***

Geliş Tarihi: Eylül, 2020

Kabul Tarihi: Şubat, 2021

Abstract

The aim of this study was to investigate the effect of prosocial behaviours of high school students on some variables. The sample group of the study consisted of 1401 high school students. Research is one of the quantitative research methods; this is a descriptive study conducted through correlational scanning to investigate the relationship between two or more variables and to obtain clues about cause and effect. According to the findings of the study, variables that have a significant relationship between at least one of the sub-dimensions of the Prosocial Tendency Scale (PTM-R) are as follows; gender, number of siblings, family and teacher help thinking status, grade level and type of high school. According to the meaningful differences found, the importance of prosocial tendencies is seen in students' lives. There are many variables that affect prosocial behaviours in general.

Keywords: Child development, high school students, prosocial behaviour, social development.

ERGENLERİN PROSOSYAL DAVRANIŞ EĞİLİMLERİNİN BAZI DEĞİŞKENLERE GÖRE İNCELENMESİ: BİR ŞEHİR ÖRNEĞİ

Öz

Bu çalışmanın amacı, lise öğrencilerinin prososyal davranışlarının bazı değişkenler üzerindeki etkisini araştırmaktır. Araştırmanın örneklem grubu 1401 lise öğrencisinden oluşmaktadır. Araştırma nicel araştırma yöntemlerinden biri olan iki veya daha fazla değişken arasındaki ilişkiyi araştırmak ve neden-sonuç hakkında ipuçları elde etmek için korelasyon taraması yoluyla yapılan tanımlayıcı bir çalışmadır. Araştırmanın bulgularına göre, Prososyal Eğilim Ölçeğinin (PTM-R) alt boyutlarından en az bir değişken ile arasında anlamlı bir ilişkisi olan değişkenler; cinsiyet, kardeş sayısı, aile ve öğretmenin yardım ettiğini düşünme, sınıf düzeyi ve lise türüdür. Bulunan anlamlı farklılıklara göre, prososyal eğilimlerin öğrencilerin yaşamlarında önemli olduğu görülmektedir. Genel olarak prososyal davranışları etkileyen birçok değişken vardır.

Anahtar Sözcükler: Çocuk gelişimi, lise öğrencileri, prososyal davranış, sosyal gelişim.

* This study has been produced from a master thesis in Hacettepe University, Health Sciences Institution.

** Res. Asst.; Ağrı İbrahim Çeçen University, Faculty of Education, Preschool Education, atasamett@gmail.com

*** Prof. Dr.; Hacettepe University, Faculty of Health Sciences, Child Development, ismihan@hacettepe.edu.tr

Ethics Committee Permission of Research: Hacettepe University Senate Ethics Committee Commission, 05.02.2019 / 35853172-755.02.01.

Introduction

One of the fundamental principles of being human is living as a community in a social structure. Socialisation is a kind of phenomenon appears in every period of life and enables to societies living together. The circulation of the social structure is provided by prosocial behaviours. Teaching prosocial behaviours in childhood leads them behaving healthy in society when they become adults.

Relationships are a combination of interpersonal interactions in personal and professional nature. Looking at interpersonal relationships helps us to make a convenient interaction with others and understand ourselves (DeCenzo & Silhanek, 2002). It is strongly believed that characteristics of social development are mostly influenced by the environmental effect than by genetical effects, in other words that learning is more effective in being a social person. It is broadly accepted that socialisation is participation of person in to one or more social groups. In addition, socialisation includes some rules, roles, standards and values (Grusec & Hastings, 2007).

Prosocial behaviours described as positive social behaviours in the perspective of social ground. Prosocial behaviours have very important role in a society. It is due to the fact that providing the circulation of society is possible by helping somebody when s/he needs help (Penner et al., 2005). There is no term of prosocial as a word in many dictionaries; social scientists created it as opposed to the term of antisocial (Batson & Powell, 2003). Prosocial behaviours have a significant place in social development because it prevents the chaos that may occur in society and allows societies to live harmoniously. Prosocial behaviours are based on positive behaviours which are beneficial for person or a group without any expectation.

Prosocial behaviour is defined in terms of outcomes intended for others; they are done voluntarily rather than under pressure (Eisenberg & Mussen, 1989). Prosocial behaviours are varied on assisting, sharing, donating, taking responsibility in any emergency case, solacing, and the degree of risk the actor is involved in or self-sacrifice (Michalik, 2005). According to Carlo and Randall (2002), it is possible to investigate prosocial behaviours in six sub-dimensions as public, emotional, altruistic, dire, anonymous and compliant.

To briefly describe these behaviours;

Public prosocial behaviours are achieving social acceptance, social-esteem and developing self-value via behaving positively in society (Hardy, 2006). *Emotional prosocial behaviours* have been conceptualized as an orientation toward helping others under emotionally stimulating conditions. These behaviours can be defined as helping someone especially when s/he feels upset (Carlo & Randall, 2002). *Altruistic prosocial behaviours* are described as “intrinsically motivated voluntary behaviours that aim to benefit someone else” (Eisenberg et al., 2006). *Dire prosocial behaviours* are defined as helping in any crisis or in an emergency situation (Carlo et al., 2003; Carlo & Randall, 2002). *Anonymous prosocial behaviours* are defined as helping somebody with hiding helper’s identification (Carlo et al., 2003; Carlo & Randall, 2002). *Compliant prosocial behaviours* described as that are acting on someone else’s verbal or nonverbal request. It is commonly seemed that as help for somebody per se (Carlo & Randall, 2002; Lampridis & Papastylianou, 2017). Compliant prosocial behaviours are defined as helping others in response to a verbal or nonverbal request (Eisenberg et al., 2006).

Scientific review of main prosocial behaviours has long and rooted historical theories and studies that includes altruism, cooperation and association (Stürmer & Snyder, 2010). However, studies about prosocial systematically started in Poland as early as on the second half of the 1960s. Although this topic had been studied in different names in the Soviet psychology, it has a long history. Prosocial behaviour studies are still at primary stage. There are still numerous inconsistencies in the collected data and a lack of integration in field reviews (Reykowski, 1984).

Investigation about adolescence's prosocial behaviours is important for adolescents' personal and social behaviour variations (Carlo et al., 2007). Because the quality of prosocial behaviours depends on age and cognitive abilities (Eisenberg, 1982). In addition, it has been stated in related studies that prosocial behaviours are influenced by both environmental and biological factors (Knafo & Israel, 2008; Knafo & Plomin, 2006). While biological factors are age, temperament and gender, environmental factors are friendship relationships, family and culture (Bağcı, 2015).

There are a few studies on prosocial behaviour or changes in orientation in the middle of adolescence or early adulthood (Eisenberg et al., 2005). Studies on prosocial behaviours involving adolescence will enlighten the field. It is still not clear whether high school period, which is the step from childhood to adolescence and a new school environment influences the social relations of adolescents with their peers (Zimmer Gembeck et al., 2005). Adolescents spend less time with their parents when compare with children so that adolescents are more likely to be influenced by their peers (Hart & Carlo, 2005). In this case, conducting studies on what the differences of prosocial behaviour among high school students are caused will add light to this area.

When the socio-cultural characteristics of Ağrı province examined, family size is quite above of the Turkish average. The average household population in Turkey in 2014 was 3.6, compared to 5.9 in Ağrı (TÜİK, 2014). Çaha (2016) found the average number of children in Ağrı was 3.71. Hughes et al. (2018) highlighted that having siblings has an impact on prosocial behaviours in their study. In other words, the size of the household directly influences the prosocial behaviours.

This study looking for an answer of this main question: "Is there any significant differences in prosocial tendencies of high school students in consideration of some factors such as gender, number of siblings, grade level, type of high school?"

Method

Model of Research

This research runs quantitative method. It is a descriptive study conducted both by correlation (relational) and scanning in order to examine the relationship between two or more variables and to obtain clues about cause and effect (Büyüköztürk et al., 2017). A quantitative or numerical description of the attitudes, trends and views of the sample could be provided through scanning studies (Creswell, 2013). In the research, the prosocial tendency levels of high school students were determined, examined with various variables and the extent of the relationship between them was studied. As a result of the meeting held by Hacettepe University Senate Ethics Committee Commission on 5 February 2019 / 35853172-755.02.01 for this study, it was stated that there is no ethical objection.

Sample of Research

The sample of this research is 9th, 10th, 11th and 12th grade students in high school in the city centre of Ağrı in the spring semester of 2018-2019 academic year. According to the data of the Ağrı Provincial Directorate of National Education for the 2018-2019 Fall Semester, there are 21 high schools, 10,738 students, including 9th grade 3364, 10th grade 2707, 11th grade 2409 and 12th grade 2258 students. In order to determine the sample size, the error rate for each class was accepted as 5% and the confidence interval as 95% (Israel, 1992).

In the Spring Semester of 2018-2019, 9th, 10th, 11th and 12th grade students selected by random sampling from each high school in order to increase the diversity in accordance with the number of samples of students attending high schools in the city centre of Ağrı. This research conducted on 1641 students from 19 different high schools. 209 students' scales cancelled due to missing information. In addition, irrelevant data discovered that only children (6 pupils), father (10 pupils) or mother not alive (1 pupil), marital status of family divorced or separated (14 pupils) took away from the study due to the small number and the lack of comparison. The rest of the study was carried out with a total of 1401 students after the irrelevant data were removed. Table 1 shows the participants' gender, high school type and grade level information.

Table 1: Demographic Information of Gender, High School Type and Grade Level.

Gender	F	%
Girl	792	56.5
Boy	609	43.5
Total	1401	100.0
High School Type	F	%
Anatolian High School	682	48.7
Vocational High School	296	21.1
İmam Hatip High School	187	13.3
Science High School	69	4.9
Social Science High School	62	4.5
Fine Arts High School	61	4.4
Sports High School	44	3.1
Total	1401	100.0
Grade Level	F	%
9th Grade	357	25.5
10th Grade	391	27.9
11th Grade	376	26.8
12th Grade	277	19.8
Total	1401	100.0

Data Collection Tools

The data of the research were collected by using the "General Information Form" and "Prosocial Tendencies Measure".

The general information form was created by the researcher based on the related literature in order to collect information about the socio-demographic characteristics of the students. The form includes the gender, grade level, high school type and some family characteristics of high school students. In addition, students were asked about their parents and teachers' perspectives on helping skills for people in need.

Prosocial Tendencies Measure

Carlo and Randall (2002) developed the Prosocial Tendencies Measure (PTM) to evaluate prosocial trends. In this scale, each item is 5-grade Likert type and the scale is gradated

as "1- does not describe me at all, 5- describe me greatly". The scale has six sub-dimensions: public, emotional, altruistic, dire, anonymous and compliant prosocial behaviours. Cronbach value of Public Prosocial Behaviors was found to be .52, Cronbach value of Emotional Prosocial Behaviors .60, Cronbach value of Altruistic Prosocial Behaviors .55, Cronbach value of Compliant Prosocial Behaviors .54, Cronbach value of Anonymous Prosocial Behaviors .68, Cronbach value of Prosocial Behaviors in Dire .42. Every scores from each sub-dimension demonstrate the level of prosocial behaviours of the related sub-dimensions. The PTM was adapted into the Turkish settings by Kumru et al. (2004). In order to be conduct the PMT on adolescents, Carlo et al. (2003) added 2 more items in to the scale and updated it as PTM-R. The Prosocial Tendencies Measure-Revised consists of 25 items. The necessary permission to use the scale was first obtained from the developers of the scale. Later, another permission was obtained from the researchers who adapted the Turkish version of the scale.

Data Analysis

First, demographic information of high school students was analysed using % and frequency "f" techniques and then one-way variance analysis (ANOVA) and T-test were performed to determine whether the scores from the scales showed a significant difference according to the variables. As a result of ANOVA's significance, the LSD test was performed because the sample sizes differed from each other (Kayri, 2009).

Although the skewness and kurtosis values given in Table 2 are analysed, some variables are not within this range, they are quite close to +/- 2 values (George & Mallery, 2016; Tabachnick & Fidell, 2006) where it should show for the normal distribution, but some variables are not in this range.

Table 2: Central Tendency Measures of the Scales.

	\bar{X}_{mean}	Median	Mod	Skewness	Kurtosis
Public	2.13	2.00	1.00	.716	-.011
Emotional	3.76	3.80	4.20	-.621	.280
Altruistic	3.23	3.17	3.00	.552	4.072
Dire	3.63	3.67	5.00	-.703	-.163
Anonymous	3.81	4.00	5.00	-.642	-.214
Compliant	4.02	4.00	5.00	1.351	29.886

ANOVA and T-test are strong where the universe distribution does not seem normal in distribution. When the sample sizes are greater than or equal to 20, the distribution of normality is not a problem (Tan, 2016). The lowest sample number is 25, while the second lowest is 31. Therefore, parametric tests are preferred.

Significance value accepted as 0.05. Accordingly, it was stated in the study that there was a significant difference in the case of $p < 0.05$, and that there was no significant difference in the case of $p > 0.05$.

Findings

Table 3 shows the T-test of the Prosocial Trends Scale (PTM-R) of the students in categorisation of gender.

Table 3: The T-Test Result of the Scores of PTM-R Scales by Gender Variable.

		n	\bar{X}_{mean}	s.d.	df	t	p
Public	Girl	792	1.99	.84	1399	-6.389	.000*
	Boy	609	2.31	.97			
Emotional	Girl	792	3.87	.78	1399	6.055	.000*
	Boy	609	3.61	.81			
Altruistic	Girl	792	3.31	.83	1399	4.735	.000*

	Boy	609	3.10	.77			
Dire	Girl	792	3.77	.99	1399	5.717	.000*
	Boy	609	3.44	1.11			
Anonymous	Girl	792	3.91	.94	1399	5.196	.000*
	Boy	609	3.66	.87			
Compliant	Girl	792	4.17	1.12	1399	6.172	.000*
	Boy	609	3.81	1.05			

*p<0.05

Whether the prosocial tendencies of participants differ significantly by gender is examined in Table 3. The sub-dimensions of PTM-R in accordance with gender examined and a significant difference was found in public prosocial behaviours ($t_{1399}=-6,389$, $p<0,05$). It can be said that male students have more public prosocial behaviours than female students. There was a significant difference in emotional prosocial behaviours by gender ($t_{1399}=6,055$, $p<0,05$). It can be said that female students act more emotional prosocial behaviours than male students. There was a significant difference in altruistic prosocial behaviours by gender ($t_{1399}=4,735$, $p<0,05$). Female students' altruistic prosocial behaviours are higher than male students. There was a significant difference in dire prosocial behaviours by gender ($t_{1399}=5,717$, $p<0,05$). It can be said that the significant difference found that female students display more dire prosocial behaviours than male students. There was a significant difference in anonymous prosocial behaviours in favour of female students by gender ($t_{1399}=5,196$, $p<0,05$). It can be said that female students perform more anonymous prosocial behaviours than male students. There was a significant difference in compliant prosocial behaviours in kindness of female students by gender ($t_{1399}=6,172$, $p<0,05$). It could be said that female students perform more compliant prosocial behaviours than male students.

In Table 4, the number of siblings of the students participating in the study is given as ANOVA result according to PTM-R.

Table 4: ANOVA Findings of the Students' Sibling Numbers

	Number of Siblings	n	X _{mean}	s.d.	df	F	p
Public	1 sibling	67	1.93	.93	5/1395	1.154	.330
	2 siblings	191	2.16	1.01	5/1395		
	3 siblings	292	2.17	.90	5/1395		
	4 siblings	294	2.10	.88	5/1395		
	5 siblings	214	2.07	.90	5/1395		
	6 siblings and above	343	2.18	.90	5/1395		
Emotional	1 sibling	67	3.65	.81	5/1395	.445	.817
	2 siblings	191	3.74	.84	5/1395		
	3 siblings	292	3.78	.80	5/1395		
	4 siblings	294	3.78	.79	5/1395		
	5 siblings	214	3.73	.79	5/1395		
	6 siblings and above	343	3.76	.82	5/1395		
Altruistic	1 sibling	67	3.14	.80	5/1395	.934	.458
	2 siblings	191	3.29	.94	5/1395		
	3 siblings	292	3.18	.75	5/1395		
	4 siblings	294	3.27	.81	5/1395		
	5 siblings	214	3.17	.81	5/1395		
	6 siblings and above	343	3.23	.80	5/1395		
Dire	1 sibling	67	3.66	1.11	5/1395	.656	.657
	2 siblings	191	3.63	1.04	5/1395		
	3 siblings	292	3.70	1.05	5/1395		
	4 siblings	294	3.58	1.09	5/1395		
	5 siblings	214	3.68	.98	5/1395		

	6 siblings and above	343	3.58	1.06	5/1395		
Anonymous	1 sibling	67	3.84	.84	5/1395	.191	.966
	2 siblings	191	3.80	.95	5/1395		
	3 siblings	292	3.81	.94	5/1395		
	4 siblings	294	3.83	.90	5/1395		
	5 siblings	214	3.75	.92	5/1395		
	6 siblings and above	343	3.80	.91	5/1395		
Compliant	1 sibling	67	3.92	.97	5/1395	.366	.876
	2 siblings	191	3.99	1.04	5/1395		
	3 siblings	292	3.99	1.03	5/1395		
	4 siblings	294	4.01	.96	5/1395		
	5 siblings	214	4.00	1.03	5/1395		
	6 siblings and above	343	4.08	1.37	5/1395		

*p<0.05

In order to determine whether prosocial tendencies were significantly different in accordance with the number of sibling's ANOVA test used and it was found that there were no significant differences in all sub-dimensions of PTM-R ($P>0.05$). Accordingly, it can be said that the number of siblings does not predict prosocial tendencies.

Table 5 demonstrates the ANOVA result for determination of whether students' grade levels differ significantly in PTM-R.

Table 5: ANOVA Result by Grade Level Variable.

		n	X _{mean}	s.d.	df	F	p	Difference
Public	9 th grade	357	2.29	.98	3/1397	6.367	.000*	A>B
	10 th grade	391	2.12	.87	3/1397			A>C
	11 th grade	376	1.99	.81	3/1397			A>D
	12 th grade	277	2.13	.98	3/1397			
Emotional	9 th grade	357	3.77	.82	3/1397	1.715	.162	
	10 th grade	391	3.73	.79	3/1397			
	11 th grade	376	3.71	.79	3/1397			
	12 th grade	277	3.84	.81	3/1397			
Altruistic	9 th grade	357	3.12	.89	3/1397	5.682	.001*	C>A
	10 th grade	391	3.16	.78	3/1397			D>A
	11 th grade	376	3.29	.77	3/1397			C>B
	12 th grade	277	3.35	.79	3/1397			D>B
Dire	9 th grade	357	3.55	1.12	3/1397	1.245	.292	
	10 th grade	391	3.61	1.05	3/1397			
	11 th grade	376	3.69	.98	3/1397			
	12 th grade	277	3.67	1.07	3/1397			
Anonymous	9 th grade	357	3.60	.98	3/1397	8.134	.000*	B>A
	10 th grade	391	3.87	.90	3/1397			C>A
	11 th grade	376	3.82	.83	3/1397			D>A
	12 th grade	277	3.93	.93	3/1397			
Compliant	9 th grade	357	3.91	1.12	3/1397	1.560	.197	
	10 th grade	391	4.08	1.26	3/1397			
	11 th grade	376	4.03	.96	3/1397			
	12 th grade	277	4.03	1.05	3/1397			
*p<.05	A=9 th grade	B=10 th grade	C=11 th grade	D=12 th grade				

Table 5 indicates that there is a significant difference in public prosocial behaviours ($F_{1397}=6,367$, $p<0,05$), altruistic prosocial behaviours ($F_{1397} = 5,682$, $p <0,05$) and anonymous prosocial behaviours ($F_{1397}=5,682$, $p<0,05$). According to this knowledge, it can be said that the grade level variable has an impact on public, altruistic and anonymous prosocial behaviours. LSD test was applied to determine among which means are different.

According to the LSD test results, it can be said that 9th grade students ($\bar{X}=2,29$) have more public prosocial behaviours than the 10th ($\bar{X}=2,12$), 11th ($\bar{X}=1,99$) and 12th ($\bar{X}=2,13$) grade students. there is a relation between the 9th grade ($\bar{X}=3,12$) and the 10th grade ($\bar{X}=3,16$) with the 11th grade ($\bar{X}=3,29$) and 12th grade ($\bar{X}=3,35$) students in altruistic prosocial behaviours. It can be said that the 9th and 10th grade students perform less altruistic prosocial behaviours compared to the 11th and 12th grade students. According to the rest of results of LSD test, it can be commented that the 9th grade students ($\bar{X}=3,60$) has less anonymous prosocial behaviours than the 10th grade ($\bar{X}=3,87$), 11th grade ($\bar{X}=3,82$) and 12th grade ($\bar{X}=3,93$) students. Table 6 shows the ANOVA result of PTM-R according to the type of high school.

Table 6: ANOVA Result of PTM-R Is Given According to the Students' High School Types.

		n	X _{mean}	s.d.	df	F	p	Difference
Public	Science High School	69	1.80	.80	6/1394	15.774	.000*	C>A, B, G E>A, B, G D>A, B, G D>C, E, F F>A, B, G
	Anatolian High School	682	1.98	.86	6/1394			
	İmam Hatip High School	187	2.29	.89	6/1394			
	Sports High School	44	2.90	.94	6/1394			
	Vocational High School	296	2.33	.94	6/1394			
	Fine Arts High School	61	2.40	.94	6/1394			
	Social Science High School	62	1.91	.83	6/1394			
Emotional	Science High School	69	3.56	.88	6/1394	2.702	.013*	C>A, B, F E>A G>A, B
	Anatolian High School	682	3.71	.80	6/1394			
	İmam Hatip High School	187	3.89	.81	6/1394			
	Sports High School	44	3.78	.69	6/1394			
	Vocational High School	296	3.80	.76	6/1394			
	Fine Arts High School	61	3.66	.88	6/1394			
	Social Science High School	62	3.93	.82	6/1394			
Altruistic	Science High School	69	3.56	.68	6/1394	11.148	.000*	A>B, C, D A>E, F B>C, D, E, F G>C, D, E, F
	Anatolian High School	682	3.33	.84	6/1394			
	İmam Hatip High School	187	3.10	.79	6/1394			
	Sports High School	44	2.86	.57	6/1394			
	Vocational High School	296	3.01	.75	6/1394			
	Fine Arts High School	61	3.05	.74	6/1394			
	Social Science High School	62	3.44	.83	6/1394			
Dire	Science High School	69	3.84	1.05	6/1394	2.294	.033*	A>D, E C>D, E
	Anatolian High School	682	3.63	1.10	6/1394			
	İmam Hatip High School	187	3.77	.89	6/1394			
	Sports High School	44	3.37	1.01	6/1394			
	Vocational High School	296	3.50	1.07	6/1394			
	Fine Arts High School	61	3.69	1.02	6/1394			
	Social Science High School	62	3.68	.91	6/1394			
Anonymous	Science High School	69	3.87	.92	6/1394	5.877	.000*	A>F G>A, B, D, E, F C>B, D, E, F B>E, F
	Anatolian High School	682	3.81	.91	6/1394			
	İmam Hatip High School	187	3.98	.93	6/1394			
	Sports High School	44	3.64	.72	6/1394			
	Vocational High School	296	3.64	.95	6/1394			
	Fine Arts High School	61	3.56	.83	6/1394			
	Social Science High School	62	4.21	.75	6/1394			
Compliant	Science High School	69	3.77	.94	6/1394	2.688	.013*	E>A G>A, B, C, E
	Anatolian High School	682	3.95	1.04	6/1394			
	İmam Hatip High School	187	4.06	1.02	6/1394			
	Sports High School	44	4.19	.95	6/1394			
	Vocational High School	296	4.06	1.04	6/1394			
	Fine Arts High School	61	4.14	.91	6/1394			
	Social Science High School	62	4.40	2.20	6/1394			

*p<0.05 A=Science B=Anatolian C=İmam Hatip D=Sports E=Vocational F=Fine Arts G=Social Science

It seems that a significant difference was found in all the sub-dimensions of PTM-R according to the high school type variable ($p < 0.05$) in Table 6.

LSD testing was used to determine the difference among the variables of the meaningful difference in PTM-R. When the average scores were examined, it seemed that the public prosocial behaviours of the students in the Sports High School were higher than the other high school types. The lowest average score belongs to the students in the Science High School. Table 6 shows that there is a meaningful difference among the average scores of other high school types. The biggest difference in emotional prosocial behaviours found students in at İmam Hatip High School (Which is Islamic Religious Based High School). It was the lowest average among pupils in Science High School. In addition, significant differences among the other high school types were shown on the above table. While the highest average score among altruistic prosocial behaviours are among students in the Science High School, the lowest average is among the students in the Sports High School. Accordingly, students in the Science High School tend to perform altruistic prosocial behaviours compared to students in the other high school types. The lowest averages in dire prosocial behaviours were found in students in the Sports High School and the Vocational High School. The highest average is among students in the Science High School. The difference in the other high school types shown in Table 6. Students at the Social Sciences High School have higher averages than the other high school types in anonymous prosocial behaviours. The lowest average seemed in students in the Fine Arts High School. The differences among the other high school types given in the above table. While the Social Science High School's students have more compliant prosocial behaviours than the other high school's students, the lowest average observed in the Science High School's students.

T-test results given according to the prosocial tendencies of the participants whether they think that their families help people in need in Table 7

Table 7: The Result of the T-Test in Case of Thinking About the Family Help Any Needy People.

Family Helping Status		n	X _{mean}	s.d.	df	t	p
Public	Yes	987	2.11	.92	1399	-1.262	.207
	No	414	2.18	.91			
Emotional	Yes	987	3.80	.79	1399	3.168	.002*
	No	414	3.65	.83			
Altruistic	Yes	987	3.23	.80	1399	.288	.773
	No	414	3.21	.84			
Dire	Yes	987	3.68	1.03	1399	2.517	.010*
	No	414	3.52	1.10			
Anonymous	Yes	987	3.87	.90	1399	4.076	.000*
	No	414	3.65	.93			
Compliant	Yes	987	4.04	1.03	1399	1.076	.282
	No	414	3.96	1.28			

* $p < 0.05$

In Table 7, there was no significant difference in public, altruistic, and compliant prosocial behaviours when the participants' families thought they help any needy people ($p > 0.05$). According to the case of thinking that the family help in any needy people; there was a significant difference in emotional prosocial behaviours ($t_{1399} = 3.168$, $p < 0.05$), dire prosocial behaviours ($t_{1399} = 2.517$, $p < 0.05$) and anonymous prosocial behaviours ($t_{1399} = 4.076$, $p < 0.05$). This difference, in sub-dimensions of the prosocial tendencies can prove that students are influenced by their families who help people in need.

T-test results given according to the prosocial tendencies of the participants whether they think that their teachers help people in need In Table 8.

Table 8: The Result of the T-Test According to the Case of Thinking That the Teachers Help Any Needy People.

Teacher Helping Status		n	X _{mean}	s.d.	df	t	p
Public	Yes	821	2.08	.92	1399	-2.603	.009*
	No	580	2.20	.90			
Emotional	Yes	821	3.84	.76	1399	4.428	.000*
	No	580	3.64	.85			
Altruistic	Yes	821	3.23	.83	1399	.550	.582
	No	580	3.21	.78			
Dire	Yes	821	3.67	1.03	1399	1.684	.089
	No	580	3.57	1.09			
Anonymous	Yes	821	3.93	.85	1399	6.017	.000*
	No	580	3.62	.99			
Compliant	Yes	821	4.15	1.11	1399	5.331	.000*
	No	580	3.83	1.07			

*p<.05

In Table 8, according to the case of thinking that teachers help significant difference found; in public prosocial behaviours ($t_{1399} = -2,603$, $p < 0.05$), emotional prosocial behaviours ($t_{1399} = 4,428$, $p < 0.05$), anonymous prosocial behaviours ($t_{1399} = 6,017$, $p < 0.05$) and compliant prosocial behaviours ($t_{1399} = 5,331$, $p < 0.05$). This difference in the sub-dimensions of prosocial tendencies can highlight that to be students influenced by their teacher who help people in need, except public prosocial behaviours. In public prosocial behaviours, it seems that students are encouraged by the teachers who do not think their teachers help.

Discussion

This study was carried out in order to investigate which variables effect on the prosocial tendencies of the high school students. As a result of examining the findings put a thought that every influencing factor gathered in this research will guide the researchers and families in order to give them better understand on the prosocial tendencies of the high school students and to investigate the appropriate solutions.

56.5% of the participants in the research were girls and 43.5% were boys. In order to determine whether the gender variable predicted PTM-R, T-test was performed. As a result of the T-test given in Table 3, a significant difference was found by gender and in all sub-dimensions of PTM-R. The significant difference found only in favour of male students in public prosocial behaviours. The difference in the other lower dimensions of prosocial tendencies has come out in favour of female students. When the relevant literature investigated, Espinosa and Kovářik (2015) stated in their study that women performed both social behaviours and prosocial behaviours more frequently than men. Similarly, Nielson et al. (2017), discovered the results in favour of women's sociability. The results discovered in the study are in parallel with the related literature. Moreover, other studies show that prosocial behaviours are in favour of female students (Boxer et al., 2004 2004; Fabes et al., 1999 & Laible, 1999; Iverson, 2010). Kraus and Callaghan (2016) found no significant difference in public prosocial behaviours for the gender variable in their study. In line with this, the study of Aktaş and Güvenç (2006)'s about adolescents' shows parallel intention with the study of Kraus and Callaghan (2016) that boys perform more frequently prosocial behaviours in public than girls. The prosocial tendency of female students is higher than boys as it is thought that the empathy skills of girls are higher than boys (Hoffman & Levine, 1976). The public prosocial behaviours of male students are higher than female students. It could be the reason that boys are more taken over socially than girls in Turkish culture. Vatandaş (2011) states that girls are not at the forefront of the public sphere because they are raised more passively and, in a home-oriented manner, but vice versa

for boys. Çaha (2016) stated that men are more prominently than women in opening their world and making decisions in the family in Ağrı where this study conducted.

Also, the number of siblings participating in the study is examined; 24.5% have 6 siblings or more. Only 4.8% have one sibling. As it can be seen from this perspective, the majority of students participating in the study have a large number of siblings. ANOVA was performed to determine the effect of the number of siblings on prosocial tendencies. Interestingly it has been also found that, the number of siblings was expected to effect on the prosocial tendencies, but as a result of the analysis, no significant difference was found in PTM-R. In this case, it can be said that the number of siblings does not predict prosocial tendencies. However, within the contrast side of this study, Çekin (2013) elaborated in his/her study that when sibling numbers increased, prosocial behaviours actions seemed frequently. The study of Berndt and Bulleit (1985) showed that preschool children affect the prosocial behaviours among siblings. Dunn and Munn (1986) stated in their study that children who have siblings obtained more frequently prosocial behaviours than those without siblings. In addition, It is known that the increase in the number of siblings has a positive contribution to the cognitive development of children (Altun, 2019).

The reason of how the difference of siblings' number effects on the literature is the context in which the study was conducted. It is due the fact that parents will have less time for each child. For this reason, it can be assumed as a result of the children spending less time with their parents, the child faced with the behaviours about they can get less models. In addition, it can be thought that there is a need for people because of the lack of financial support as the ratios of the Provincial Life Index Report that Ağrı is 79th ranked out of 81 provinces, announced by Turkish Statistical Institute (TÜİK, 2015).

When the class levels of the students are analysed, 25.5% of them are studying at the 9th grade, 27.9% of them are at the 10th grade, 26.8% of them are at the 11th grade and 19.8% of them are at the 12th grade. As a result of ANOVA, performed in order to investigate the effect of class level variable on PTM-R shown in Table 5, a significant difference was found in public prosocial behaviours, altruistic prosocial behaviours and anonymous prosocial behaviours. Accordingly, it can be said that the class level variable has an impact on public, altruistic and anonymous prosocial behaviours. LSD test applied to determine which averages the difference among the others. According to the LSD test results, it can be said that the 9th grade students displays more public prosocial behaviours than the 10th, 11th and 12th grade students. Because, an adolescent wants to desire gaining the self-esteem and approval of the people around him/her (Carlo & Randall, 2002; Penner et al., 2005), therefore, it can be considered that their public prosocial behaviours seem frequently.

In altruistic prosocial behaviours, it was determined that there were relationships between the 9th and 10th grade students and the 11th and 12th grade students. It can be said that the 9th and 10th grade students perform less altruistic prosocial behaviours compared to the 11th and 12th grade students. It is observed that altruistic behaviours increase with age. Yurdu (2014) states that there is an increase in altruistic behaviours when a person gets older.

In addition, it can be commented that anonymous prosocial behaviours can seem students of the 9th grade less than the 10th grade, 11th grade and 12th grade students. This can be considered as the opposite of the situation in public prosocial behaviours. Therefore, it can be said that there is a decrease in anonymous prosocial behaviours in more youngers. This study shows parallelism with the literature except public prosocial behaviours. There are studies about prosocial behaviours increase with older age and grade level (Carlo et al., 2003; Eisenberg, 1982; House et al., 2013). In public prosocial behaviours, it was observed that the young age level performed more than the elder age levels. When adolescents are examined in this period characteristics, it may be explicated that their intention is to assert themselves and try to gain a reputation among their peers.

In the high school types, the highest rate found in Anatolian High School with 48.7% and the lowest rate was in Sports High School with 3.1%. It can be seen that a significant difference found in all sub-dimensions of PTM-R compared to high school type variable in the result of ANOVA which aimed to investigate whether variable of high school type has an effect on PTM-R. As a result of the significant difference found in PTM-R, LSD test performed to determine which variables are among them. According to the LSD result, the highest average in public prosocial behaviours found in the Sports High School and the lowest average found in the Science High School. In this case, the Science High School's students act public prosocial behaviours less than the other high school types. The reason that the public prosocial behaviours of Sports High School is higher than other high school types that thought to be due to the fact that athletes perform for the purpose of showing themselves and the overall consideration of sportsmanship. Emotional prosocial behaviours are the highest average of the Social Science High School's students, the lowest rate seemed in the Science High School students. In altruistic and dire prosocial behaviours, the highest rate seemed in the Science High School and the lowest rate is in the Sports High School students. In anonymous prosocial behaviours, the highest rate is in the Social Science High School and the lowest rate is in the Fine Arts High School. In compliant prosocial behaviours, the highest rate found in the Social Science High School's students while the lowest rate was in the Science High School's students.

According to the findings, it can be said that the high school type variable is a significant predictor of all sub-dimensions of students' prosocial behaviours. The relationship between all the high school types given in Table 6 in-depth. There is lack of research about the high school types associated with prosocial behaviours or positive social behaviours in the related literature. However, there are some researches explored about high school types and some behavioural disorders (Ayas & Pişkin, 2011; Horzum & Aras, 2011) found that while the qualification and academic success of the high school decreased, behavioural disorders increased.

When examining the answers given by the students to the question about whether their families think that they help people or people who need help, while 70.4% think that their families help people in need, 29.6% think their families do not. The T-test shown in Table 7, used to investigate the status of families who thought it helped. According to the results of the T-test, no significant difference found in public, altruistic and compliant prosocial behaviours. According to the case of thinking that families help; there was a significant difference in favour of emotional prosocial behaviours, dire prosocial behaviours and anonymous prosocial behaviours. Markiewicz et al. (2001) showed that adolescents frequently act prosocial behaviours to their peers if the mother shows positive behaviours. In addition, parents' prosocial perceptions are among the factors affecting their children's prosocial behaviours (Sigel et al., 1980; Strayer & Roberts, 1989). The findings of this study are in line with the relevant literature. Accordingly, it can be said that parental attitudes effect on children's positive social behaviour. It can be expected that when parents attitude prosocially, their children will act as their parents modelled.

When students' answers to the question of whether they think their teachers help people or people in need were examined, they found that teachers help people in need, with 58.6% lower than families. The T-test shown in Table 8, conducted to examine the cases of thinking teachers helped. According to the results of the T-test, there was no significant difference in altruistic and dire prosocial behaviours. Significant differences found in public prosocial behaviours, emotional prosocial behaviours, anonymous prosocial behaviours, and compliant prosocial behaviours according to the case of thinking that teachers help. This difference can be said to be influenced by students who think that their teachers help any needy people, except public prosocial behaviours, in the sub-dimensions of prosocial tendencies. It can be seen that in public prosocial behaviours, it is in favour of students who do not think their teachers help. This study is parallel with by Kıldan (2011)'s study that that teachers effect on children's behaviours

from a young age as being role models for children. Similarly, Hamre and Pianta (2001) stated that the teacher affects the child academically and behaviourally. Accordingly, it can be said that being role model of teachers has positive affect on children's social behaviours. Because families and teachers need to be motivated about prosocial behaviour Özbey and Aktemur-Gürler (2019) in their study, they stated that students' motivation levels can also be positively influenced by positive behaviours.

Conclusion

In the study, the prosocial tendencies of 1401 students from different high school types in Ağrı City Centre investigated in terms of different variables. Having a look at the whole study frame, there are many variables that effect on prosocial behaviours. According to the research findings, the results can be listed as followed by;

- Most of the prosocial behaviours tendency of female students is higher than male students.
- The number of siblings has not been found to have a significant effect on prosocial tendencies.
- The variable of thinking that participants' family helped people in need affects the emotional, dire and anonymous prosocial behaviours tendencies of the prosocial behaviours sub-dimensions.
- The variable of thinking that participants' teachers help people in need affects public, emotional, anonymous and compliant prosocial behaviours tendencies from the sub-dimensions of prosocial behaviours.
- A relationship has been found between the students' grade levels and public, altruistic and anonymous prosocial behaviours.
- High school types and prosocial behaviours tendencies have been found in related to all the sub-dimensions.

Suggestions

In this section, suggestions given for families, researchers and educators as followed by;

- Due to boys' prosocial tendencies are lower than girls', trainings can plan for boys to develop their prosocial behaviours.
- When the findings of this study and other studies in the literature are analysed, it could be seen that there is an effect of the family on the prosocial tendencies. Therefore, families should be educated how being role models for developing their children's prosocial behaviours.
- School counsellors should organize informative seminars about students' prosocial behaviours and interpersonal communication skills.
- Providing teachers information about prosocial behaviours and modelling children can increase to act prosocial behaviours.
- Qualitative studies can be conducted on prosocial behaviours.
- As the last recommendation of this study that there should be more longitudinal study and in-dept research about the prosocial tendencies.

References

- Aktaş, V. & Güvenç, G. B. (2006). Kız ve erkek ergenlerde saldırgan ve olumlu sosyal davranışlar ile yaş, ilişkisel bağlam ve kişiler arası duyarlılık arasındaki ilişkiler. *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi*, 23(2), 233-264.
- Altun, D. (2019). 60-71 aylık okul öncesi dönemdeki çocukların alıcı ve ifade edici dil kelime bilgisinin teknoloji kullanımı ve ailesel faktörlere göre incelenmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 8(2), 1158-1182.
- Ayas, T. & Pişkin, M. (2011). Lise öğrencileri arasındaki zorbalık olaylarının cinsiyet, sınıf düzeyi ve okul türü bakımından incelenmesi. *İlköğretim Online*, 10(2), 550-568.
- Bağcı, B. (2015). *Çocuk ve yetişkin prososyallik ölçeklerinin geçerlik güvenirlik çalışması ve çocuk ile anne-baba prososyal davranışları arasındaki ilişkinin incelenmesi*. Yayınlanmamış Yüksek Lisans Tezi, Aydın: Adnan Menderes Üniversitesi.
- Batson, C. D. & Powell, A. A. (2003). Altruism and prosocial behavior. In I. B. Weiner (Ed.), *Handbook of Psychology* (Vol. Volume 5). John Wiley & Sons, Inc. <https://doi.org/10.1002/0471264385.wei0519>
- Berndt, T. & Bulleit, T. (1985). Effects of sibling relationships on preschoolers' behavior at home and at school. *Developmental psychology*, 21(5), 761-767. <https://doi.org/10.1037/0012-1649.21.5.761>
- Boxer, P., Tisak, M. S. & Goldstein, S. E. (2004). Is it bad to be good? An exploration of aggressive and prosocial behavior subtypes in adolescence. *Journal of Youth and Adolescence*, 33(2), 91-100. <https://doi.org/10.1023/B:JOYO.0000013421.02015.ef>
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2017). *Bilimsel araştırma yöntemleri*. Pegem Akademi. <https://doi.org/10.14527/2240>
- Çaha, H. (2016). *Ağrı ili kadın profili araştırması*. KÜREL Akademi Eğitim Araştırma ve Danışmanlık.
- Carlo, G., Crockett, L. J., Randall, B. A., & Roesch, S. C. (2007). A latent growth curve analysis of prosocial behavior among rural adolescents. *Journal of Research on Adolescence*, 17(2), 301-324. <https://doi.org/10.1111/j.1532-7795.2007.00524.x>
- Carlo, G., Hausmann, A., Christiansen, S. & Randall, B. A. (2003). Sociocognitive and behavioral correlates of a measure of prosocial tendencies for adolescents. *The Journal of Early Adolescence*, 23(1), 107-134. <https://doi.org/10.1177/0272431602239132>
- Carlo, G. & Randall, B. A. (2002). The Development of a measure of prosocial behaviors for late adolescents. *Journal of Youth and Adolescence*, 31(1), 31-44. <https://doi.org/10.1023/A:1014033032440>
- Çekin, A. (2013). İmam hatip lisesi öğrencilerinin prososyal davranış eğilimleri üzerine nicel bir inceleme. *Uluslararası Sosyal Araştırmalar Dergisi*, 6(28), 34-45.
- Creswell, W. J. (2013). *Research design qualitative, quantitative and mixed research design 4th edition*. SAGE Publications.
- DeCenzo, D. A. & Silhanek, B. (2002). *Human relations: Personal and professional development*. Prentice Hall. <https://books.google.com.tr/books?id=fZcQPwAACAAJ>
- Dunn, J. & Munn, P. (1986). Siblings and the development of prosocial behaviour. *International Journal of Behavioral Development*, 9(3), 265-284. <https://doi.org/10.1177/016502548600900301>

- Eisenberg, N. (1982). *The development of prosocial behavior*. Academic Press. <https://books.google.com.tr/books?id=OK19AAAAMAAJ>
- Eisenberg, N., Cumberland, A., Guthrie, I. K., Murphy, B. C. & Shepard, S. A. (2005). Age changes in prosocial responding and moral reasoning in adolescence and early adulthood. *15*(3), 235-260. <https://doi.org/doi:10.1111/j.1532-7795.2005.00095.x>
- Eisenberg, N., Fabes, R. A. & Spinrad, T. L. (2006). Prosocial development. In N. Eisenberg, W. Damon, R. M. Lerner (Eds.), *Handbook of Child Psychology: Social, Emotional, and Personality Development, Vol. 3, 6th ed.* (pp. 646-719). John Wiley & Sons Inc.
- Eisenberg, N., & Mussen, P. H. (1989). *The Roots of prosocial behavior in children*. Cambridge University Press. <https://doi.org/DOI:10.1017/CBO9780511571121>
- Espinosa, M. P., Kovářík, J. (2015). Prosocial behavior and gender [Original Research]. *9*(88). <https://doi.org/10.3389/fnbeh.2015.00088>
- Fabes, R. A., Carlo, G., Kupanoff, K. & Laible, D. (1999). Early adolescence and prosocial/moral behavior I: The role of individual processes. *The Journal of Early Adolescence, 19*(1), 5-16. <https://doi.org/10.1177/0272431699019001001>
- George, D. & Mallery, P. (2016). *IBM SPSS statistics 23 step by step (14th edition)*. Taylor & Francis.
- Grusec, J. E. & Hastings, P. D. (2007). *Handbook of socialization: Theory and research*. Guilford Press.
- Hamre, B. K. & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 625-638. <http://www.jstor.org/stable/1132418>
- Hardy, S. A. (2006). Identity, reasoning and emotion: An empirical comparison of three sources of moral motivation [doi:10.1007/s11031-006-9034-9]. *Motivation and Emotion, 30*(3), 207-215. <https://doi.org/10.1007/s11031-006-9034-9>
- Hart, D. & Carlo, G. (2005). Moral development in adolescence. *Journal of Research on Adolescence, 15*(3), 223-233. <https://doi.org/10.1111/j.1532-7795.2005.00094.x>
- Hoffman, M. L. & Levine, L. E. (1976). Early sex differences in empathy [doi:10.1037/0012-1649.12.6.557]. *Developmental psychology, 12*(6), 557-558. <https://doi.org/10.1037/0012-1649.12.6.557>
- Horzum, M. B. & Aras, T. (2011). Ortaöğretim öğrencilerinin sanal zorba ve mağdur olma düzeylerinin okul türü ve cinsiyet açısından incelenmesi. *Journal of Educational Sciences & Practices, 10*(20), 139-159.
- House, B. R., Silk, J. B., Henrich, J., Barrett, H. C., Scelza, B. A., Boyette, A. H., Hewlett, B. S., McElreath, R. & Laurence, S. (2013). Ontogeny of prosocial behavior across diverse societies. *Proceedings of the National Academy of Sciences, 110*(36), 14586-14591. <https://doi.org/10.1073/pnas.1221217110>
- Hughes, C., McHarg, G. & White, N. (2018). Sibling influences on prosocial behavior. *Current Opinion in Psychology, 20*, 96-101. <https://doi.org/https://doi.org/10.1016/j.copsyc.2017.08.015>
- Israel, G. D. (1992). *Determining sample size*. University of Florida.
- Iverson, E. (2010). Helping others helps me: prosocial behavior as a function of identity development and self-regulation in emerging adulthood. *Journal of Gustavus Undergraduate Psychology, 6*(1).

- Kayri, M. (2009). Araştırmalarda gruplar arası farkın belirlenmesine yönelik çoklu karşılaştırma (post-hoc) teknikleri. *Fırat Üniversitesi Sosyal Bilimler Dergisi*, 19(1), 51-64.
- Kıldan, O. (2011). Öğretmen-çocuk ilişkilerinin çeşitli değişkenler açısından incelenmesi. *Buca Eğitim Fakültesi Dergisi*, 30, 103-120.
- Knafo, A. & Israel, S. (2008). *Genetic and environmental influences on prosocial behavior* (7). (Inaugural Herzliya Symposium on Personality and Social Psychology, Issue. <http://portal.idc.ac.il/en/symposium/herzliyasymposium/pages/participants.aspx>
- Knafo, A. & Plomin, R. (2006). Parental discipline and affection and children's prosocial behavior: Genetic and environmental links [doi:10.1037/0022-3514.90.1.147]. *Journal of Personality and Social Psychology*, 90(1), 147-164. <https://doi.org/10.1037/0022-3514.90.1.147>
- Kraus, M. W. & Callaghan, B. (2016). Social class and prosocial behavior: the moderating role of public versus private contexts. *Social Psychological and Personality Science*, 7(8), 769-777. <https://doi.org/10.1177/1948550616659120>
- Kumru, A., Carlo, G. & Edwards, C. P. (2004). Olumlu sosyal davranışların ilişkisel, kültürel, bilişsel ve duyuşsal bazı değişkenlerle ilişkisi. *Türk Psikoloji Dergisi*, 19(54), 109-125.
- Lampridis, E. & Papastilianou, D. (2017). Prosocial behavioural tendencies and orientation towards individualism–collectivism of greek young adults. *International Journal of Adolescence and Youth*, 22(3), 268-282. <https://doi.org/10.1080/02673843.2014.890114>
- Markiewicz, D., Doyle, A. B. & Brendgen, M. (2001). The quality of adolescents' friendships: associations with mothers' interpersonal relationships, attachments to parents and friends, and prosocial behaviors. *Journal of Adolescence*, 24(4), 429-445. <https://doi.org/https://doi.org/10.1006/jado.2001.0374>
- Michalik, N. M. (2005). *Determinants of adolescent prosocial behavior: Parental personality and socialization*. Yayınlanmamış Doktora Tezi, US: Arizona State University.
- Nielson, M. G., Padilla Walker, L. & Holmes, E. K. (2017). How do men and women help? validation of a multidimensional measure of prosocial behavior. *Journal of Adolescence*, 56, 91-106. <https://doi.org/https://doi.org/10.1016/j.adolescence.2017.02.006>
- Özbey, S. ve Aktemur Gürlü, S. (2019). Okul öncesi eğitim kurumlarına devam eden çocukların motivasyon düzeyleri ile sosyal becerileri ve problem davranışları arasındaki ilişkinin incelenmesi. *Uluslararası Türkçe Edebiyat Kültür Eğitim Dergisi*, 8(1), 587-602.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A. & Schroeder, D. A. (2005). Prosocial behavior: Multilevel Perspectives. 56(1), 365-392. <https://doi.org/10.1146/annurev.psych.56.091103.070141>
- Reykowski, J. (1984). General theoretical approaches. In e. Staub, D. Bar-Tal, J. Karylowski & J. Reykowski (Eds.), *Development and maintenance of prosocial behavior: international perspectives on positive morality*. Plenum Press <https://doi.org/10.1007/978-1-4613-2645-8>
- Sigel, I. E., Lisi, A. V. M.-D. & Johnson, J. E. (1980). Parental distancing, beliefs and children's representational competence within the family context. *ETS Research Report Series*, 1980(2), i-177. <https://doi.org/10.1002/j.2333-8504.1980.tb01215.x>

- Strayer, J. & Roberts, W. (1989). Children's empathy and role taking: child and parental factors, and relations to prosocial behavior. *Journal of Applied Developmental Psychology*, 10(2), 227-239. [https://doi.org/10.1016/0193-3973\(89\)90006-3](https://doi.org/10.1016/0193-3973(89)90006-3)
- Stürmer, S. & Snyder, M. (2010). In S. Stürmer & M. Snyder (Eds.), *The psychology of prosocial behavior: group processes, intergroup relations, and helping* (pp. xi, 450-xi, 450). Wiley-Blackwell.
- Tabachnick, B. G. & Fidell, L. S. (2006). *Using multivariate statistics (5th International ed.)*. Pearson Education Inc.
- Tan, Ş. (2016). *SPSS ve excel uygulamalı temel istatistik-1*. Pegem Akademi.
- TÜİK. (2014). *İstatistiklerle aile*.
- TÜİK. (2015). *İllerde yaşam endeksi*. <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=24561>
- Vatandaş, C. (2011). Toplumsal cinsiyet ve cinsiyet rollerinin algılanışı. *Sosyoloji Konferansları*, 0(35), 29-56.
- Yurdu, H. (2014). İyilik hali ile özgecilik arasındaki ilişkinin incelenmesi. *Düşünce – Yorum Sosyal Bilimler Araştırma Dergisi*, 7(13), 271-288.
- Zimmer Gembeck, M. J., Geiger, T. C. & Crick, N. R. (2005). Relational and physical aggression, prosocial behavior, and peer relations: Gender Moderation and Bidirectional Associations. 25(4), 421-452. <https://doi.org/10.1177/0272431605279841>