Osmangazi Journal of Educational Research **Volume 7(2), Fall 2020**

RESEARCH Open Access

Suggested Citation: Arslan Eroğlu, E., & Çalık, T. (2020). Teachers and students' opinions on the practice of transported education. *Osmangazi Journal of Educational Research, 7*(2), 14-38.

Submitted: 16/07/2020 **Revised:** 27/11/2020 **Accepted:** 27/11/2020

Teachers and Students' Opinions on the Practice of Transported Education

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Abstract. The purpose of this study is to determine the problems of transported secondary school practice based on the opinions of the teachers and students in the transported school and to identify whether the opinions differ in terms of various variables. The population of the research using descriptive screening model consists of 57 teachers working in a total of 4 secondary schools in Haymana district of Ankara province and 195 students transported to these four secondary schools in the 2015-2016 academic year. In the research, the Teachers' Opinions Scale for Transported Secondary School Practice and the Students' Opinions Scale for Transported Secondary School Practice were used as data collection tools. The data were collected by the researcher through visiting each school in the sample and analyzed using SPSS 15 and LISREL 8. In the analysis of the data, together with descriptive statistical methods, independent sample t-Test, one-way variance (ANOVA) were used, and the results were tabulated. According to the results obtained from the research, female students participating in the research have more negative views about transported education than male students. In addition, it was observed that students in the older age group had more negative thoughts than younger students. It was also observed that there was no significant difference between the monthly income level of the family and the opinions of students about the application of transported education. Teachers, on the other hand, were found to have more negative views on the problems related to transportation vehicles as the year of professional work increased. It was seen that there was no significant difference in the opinions of teachers about the application of transported education and the year of professional work at a transporting central school. As a result, some suggestions were made based on the findings of the research.

Keywords: Education, transported education, combined class

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Note: This study is a portion of the master thesis to be defended of Elif ARSLAN EROĞLU

The definition of education in our country has been acknowledged as "the process of creating a behavior change in human" by educators adopting behavioral education model. However, this definition started to be incomplete as a result of the advancement of science and the renewal of pedagogical approaches and could not meet the concept of education (Fırat, 2008). However, education is that the student realizes the physical, emotional, mental and social development of his/her own and adapts to the society to which he/she belongs by protecting his/her own personal existence (Öztürk, 2001). The individual should catch up with the rapidly developing and new technological developments and innovations in art and literature to reveal his/her own talents at the optimum level. This requirement leads to the need for qualified workforce. It is only possible for a society to keep up with the requirements of the modern age with its qualified workforce. Education is the most important and essential element to train qualified workforce. Education primarily paves the way for raising qualified individuals. Individuals who have undergone a good education system ensure the development of the society, the transfer of development, and the existence of a constantly-developing and evolving society.

Education, is a process of inviting truth and possibility, of encouraging and giving time to discovery. It is, as John Dewey (1916) put it, a social process – 'a process of living and not a preparation for future living'. In this view educators look to act with people rather on them. Their task is to educe to bring out or develop potential. Education is a combination of growth and human development with social legacy. Kohnstamm and Gunning (1995): Education is the formation of conscience. Education is a process of self-formation and self-determination ethically, conformed conscience.

Along with the changing technologies and developing science, it can be argued that the importance attributed to education by societies and countries has also changed. The society in need of a different education system in parallel with this change forces certain functions and structures of education to change and calls for education system to ensure this change in the socialization process of the new generations (Erol, 2011).

Today, the most important milestone of the education process is schools. In this process, the intertwining of the concepts of education and school reminds us that education is a concept solely specific to schools. However, education exists in every dimension of life. Therefore, it can be stated that the concept of education is much broader than the concept of school (Özyılmaz, 2013). In the

broadest sense, education is the device by which a social group continued existence renew yourself, and defend his ideas (Horne, 1932).

Due to the scattered population formed as a result of scattered settlements in our country, there is no school where education and training continues in every settlement. The educational needs of children in the age of compulsory education cannot be fully met in these places. The Ministry of National Education developed a number of solutions in order to provide education to every individual on equal terms. One of these solutions is "Transported Education Model" (Kavak, 1997). One of the most important reasons that make the Transported Education Model mandatory is compulsory education.

Since it is not possible to assign a separate teacher to each class in places where the number of students per class is low, it is deemed appropriate to apply a multi-grade class. However, multi-grade classroom practices which have been applied for many years in our country has caused many failures. Tekışık (1968) specified the following causes of these failures: teachers' failure to prepare lesson plans as desired, uncertainty of in-class methods, teacher candidates not being trained to handle the multi-grade class and having related problems in classroom control, problems in the inspection system, the high number of students in the classrooms, lack of school building, the number of classrooms and equipment, environmental factors, absenteeism in schools. In order to eliminate the problems in the multi-grade schools and to provide students in these schools and students who live in dispersed geographical areas with no schools with more efficient education opportunities, equal educational opportunities, and equal rights provided to every student in compulsory and uninterrupted education, model of transported education emerged with the transfer of students to the primary schools selected as the central education institution.

The purpose of transported education model in Regulation for Transported Primary Education of the Ministry of National Education is as follows: "To ensure that students living in settlements with no primary school, middle school or imam-hatip secondary school or students of these schools which are closed due to various reasons or which provide multi-grade education are provided with a qualified education by being transported on a daily basis to the schools designated as a transporting center" (Ministry of National Education -[MNE], 2000). Transported education is used as a tool to provide equal education opportunities for every individual living in our country.

The Article 42 of the 1982 Constitution of the Republic of Turkey specifies "No one shall be deprived of the right of education, and primary education is compulsory for all citizens of both

sexes and is free of charge in state schools. According to the Article 8 entitled "Equality of Opportunity" in the Chapter entitled "Basic Principles of Turkish National Education" of the Basic Law of National Education numbered 1739, "Every individual is provided with equal opportunity in education regardless of sex. Necessary grants, scholarships, loans and other aids are provided to enable successful students without financial means to study up to the highest education levels. Special measures are taken to raise children in need of special education and protection". Therefore, the Republic of Turkey is legally obliged to provide the right to public education as specified in the Constitution.

Transported Primary Education Model was first implemented by the Directorate General of Primary Education as a trial in Kocaeli with two and in Kırklareli with three central schools by transporting 305 students in total as of the second semester of the 1989 -1990 Academic Year with the aim of increasing the quality of education, ensuring the equality of opportunity, transporting students studying in multi-grade schools to schools with independent classes (Büyükkaragöz and Şahin, 1995). The results of the pilot scheme carried out in Kocaeli and Kırklareli were analyzed both in terms of education and economy. These results were assessed to ensure certainty of the scheme. The positive results of the scheme showed that the scheme was efficient. The first results were as follows:

Assessment of Transported Primary Education Pilot Scheme in terms of Education and Training (Yangın 1991): The first results of the application in terms of education are as follows: Provision of equal opportunities in education, provision of no multi-grade class in villages where transported education is implemented, increase in the number of students who study in schools with normal standard of education and high opportunities, elimination of shortage of teachers in places where transported education is implemented, increase in success of students who live in small settlements and cannot find the opportunity to go to secondary school, especially female students, increase in social and cultural activities of the students and positive habits on health, cleaning and nutrition.

Assessment of Transported Primary Education Pilot Scheme in terms of Economy (Yangın, 1991): Providing a higher-quality education environment due to the allocation of teacher, course materials, and the like to the transporting school for the benefit of students, assigning teachers working in the transporting schools to other schools if necessary, providing students with the opportunity to benefit from social-cultural activities and health services (health screening at least once a month), elimination of constructing school and lodgings in small settlements, elimination of

providing allowance for electricity, water, fuel, stationery, lesson equipment for schools transported to the centers, elimination of additional expenses for schools that are not in use and putting them into service as teacher lodgings and public training centers, elimination of educational expenses of the parents for children sent to the provincial or district centers to have their children educated in secondary school, are the first results of the pilot application economically.

Upon successful implementation of this scheme, 305 students from 12 schools and settlements in 2 provinces were transported to 5 central schools in the 1989-1990 academic year. In addition, the project, which also envisaged providing efficiency in resource use, costed 950.000 TL in 1989-1990 academic year Transportation Primary Education (MNE, 2009).

As of the 1990-1991 academic year, transported education continued in the 77 selected centers in the provinces of Antalya, Çankırı, Konya, Van, Çanakkale, Eskişehir, Balıkesir, Kırklareli and Kocaeli. In the 1991-1992 academic year, transported education was expanded to a wider area and implemented in 960 village schools of 29 provinces and 78 districts of these provinces, and 16538 students were transported to 375 central schools. In the 1992-1993 academic year, this practice was extended to 43 provinces, 325 districts and 938 central schools, and a total of 53676 students benefited from transported education practices (Büyükkaragöz and Şahin, 1995). Upon the introduction of the 8-year uninterrupted compulsory primary education in the 1997- 1998 academic year, 281833 students from 18213 schools and settlements in 740 districts of 72 provinces attended 4804 central schools. In the 1998-1999 academic year 521784 students from 27093 schools and settlements in 811 districts of 77 provinces attended 5700 central schools in 811 districts (Yalçın, 2006). In 2010-2011 academic year, 687056 students from 36208 schools and settlements in 802 districts of 81 provinces were transported to 5852 primary schools which are transporting centers (MNE, 2010/2011).

In the 2015-2016 academic year, the number of transported primary and secondary school students is 808332 in total. Considering that the number of students transported in secondary education is 479000, it can be said that the number of students transported by transported education has reached a considerable number of 1,287.000 in total (MNE, 2015/2016).

Table 1.

Development of the Transported Primary Education Project by Years

Academic Years	Number of Provinces	Number of central schools	Number of Transported Schools Settlement Units	Number of Transported Students
1989-1990	2	5	12	305
1990-1991	9	78	258	3289
1991-1992	29	408	1094	18 256
1992-1993	43	938	2371	53 676
1993-1994	56	1653	4416	84 263
1994-1995	57	1630	4683	74 981
1995-1996	62	2,182	5994	95 554
1996-1997	64	2336	7502	120 998
1997-1998	72	4803	18213	281 833
1998-1999	75	5697	27 081	521218
1999-2000	75	5633	27994	635 041
2000-2001	76	5249	25967	607 918
2001-2002	78	5373	27 665	636 508
2002-2003	79	5424	28044	661 757
2003-2004	79	5634	28 493	642 133
2004-2005	80	5651	29 245	669 487
2005-2006	80	5742	30 383	667 537
2006-2007	81	5843	31 076	694 520
2007-2008	81	6164	31 874	692 369
2008-2009	80	5851	34519	683 415
2009-2010	80	5754	39 559	667 475
2010-2011	81	5852	36 208	687 056
2011-2012	81	5964	37 681	741 259
2012-2013	81	7037	46 036	810 809
2013-2014	81	10:55.	44 534	825 090
2014-2015	81	10 748	54 126	850 405
2015-2016	81	11 853	43 959	808 332

(Source: Compiled from National Education Statistics, available at http://www.sgm.meb.gov.tr.)

As it can be seen in the Table 1, the transported primary education project is a long-term project that continues to expand day by day. It plays an important role especially in the dissemination of basic education. Increase in the numbers show that especially in the period when primary education was extended to eight years and the following period, transported primary education project provided great benefits to the process and continues to do so.

Transportation Training Practices in Turkey

The first study on transported education in our country was conducted by Abdullah Altunsaray in 1996. The purpose of the study is to analyze and evaluate the Practice of Primary

Education in Balıkesir based on the opinions of teachers, administrators and school inspectors. According to the study results, students who have transported education face nutrition problems. Findings of this study is as follows: The capacity of vehicles that the students are transported is insufficient. There is a heating problem in the vehicles in winter, and drivers do not have regular health checks.

Another study on this subject is Yıldırım's study (1991) on the importance of the practice of Transported Primary Education, the dissemination of primary education services, and the effects of the scattered settlement preventing the efficiency in primary education. 152 schools providing education in the 1990-1991 academic year in the central villages of Diyarbakır are taken as a sample and are evaluated in terms of the number of teachers, student distribution, number of classrooms and teaching style. Essential features in planning the "The Practice of Transported Primary Education" are stated in the conclusion part of the study. The center should be a region where transportation can be carried out smoothly and comfortably in every season. In some mountainous regions, the roads may be closed due to the rough climate conditions in winter season. In this case, it can be considered that the days when the roads are closed can be counted as holidays, and these days can be added to the calendar at the beginning or end of the year.

Another study is the one conducted by Karakütük (1996) in the Sincan district of Ankara on the "The Practice of Transported Primary Education and Its Problems". The result of the study has shown that transported education provides education opportunities for the children of families with low income levels while transported education accelerates the dissemination of 8-year education. It has also been observed that there is an increase in the level of success of students and improvement in the opportunities provided to the students.

It can be seen that the Primary Education with Transport is useful in our country which has a scattered settlement. Along with the benefits of transported education, it has caused some problems such as, physical inadequacy in the implementation of this system in the central school, difficulty in social adaptation of the transported students to new friends and teachers, transported students' lack of preparation for their classes, lack of course materials, Transported students' habits of not doing the homework and not attending the out-of-classroom activities, parents who are not interested in their children's learning, the condition of vehicles, the distance between the villages where students are transported and the central schools to which they are transported, the condition of roads and the vehicle drivers, the condition and suitability of the food in terms of hygiene, transportation and

nutrition condition, and the like. The problems that arise in the transported education practice prevent it from proceeding regularly and smoothly. It is vital to identify these problems correctly and to provide realistic and effective solutions to the problems, to make the project problem-free and more beneficial. Considering the prevalence of the scope of the transported education practice and the number and cost of transported students, it is obvious how important to provide solutions to problems faced in this practice.

The purpose of this research is to analyze the problems of transported secondary school in the light of the opinions of teachers and students in the transported school. Answers to the following questions were sought to achieve this goal.

1. In the students' opinions in transported secondary school gender, age, is there a significant difference in your family's monthly income?

2. In the opinions of teachers in transported secondary school professional seniority, is there a significant difference in your duty period as compared to the one in central school?

Method

Research Model

Research is a descriptive research to determine an existing situation. Descriptive research is a type of research that describes an existing event in terms of quantitative (using numbers) or qualitative elements (by revealing the characteristics of an individual or group) (McMillan & Schumacher, 1984 as cited in Balcı, 1989, p.412). This study is a descriptive research analyzing the current situation of the Transported Education Practice based on the opinions of teachers and students.

Study Group

The universe of the study consists of all teachers working and all students studying in schools, in which the practice of transported secondary schools is conducted, in the district center of the National Education Directorate in Haymana district of Ankara province in the academic year of 2015-2016. Stratified sampling method was used in the study. The sample group consists of 57 teachers that work only in the transported secondary schools in the district center and 195 students who study in these schools. The frequency and percentage distributions of the demographic information of the students and teachers which form the sample group are given below.

Table 2.

Frequency and Percentage Chart of Students' Demographic Information

Option							Total
Gender		Female	Male				
	n	104	91				195
	%	53.3	46.7				100
Age		10	11th	12	13	14	
	n	25	38	46	55	31	195
	%	12.8	19.5	23.6	28.2	15.9	100
Monthly Income Status of Family		Between 0 TL and 1000 TL	Between 1001TL and 2000TL	Between 2001TL And 3000TL	Between 3001TL And 4000TL	More than 4000 TL	
	n	106	54	26	5	4	195
	%	54.4	27.7	13.3	2.6	2.1	100

Table 3.

Frequency and Percentage Chart of Teachers' Demographic Information

Option						Total
Professional Seniority		1-5 Years	6-10 Years	11-15 Years	16-20 Years	
	n	30	20	5	2	57
	%	52.6	35.1	8.8	3.5	100
Working Year at Central School		1-5 Years	6-10 Years	More Than 10 And 10 Years		
	n	48	8	1		57
	%	84.2	10.0	1.8		100

Data Collection Tools

The data collection tool of the research consists of two scales developed by Recepoğlu (2006). These are 'Teachers' Opinions Scale for Transported Secondary School Practice" and "Students' Opinions Scale for Transported Secondary School Practice". Confirmatory Factor Analysis (CFA) was performed by the researcher for the validity and reliability of the scales. The results of The Confirmatory Factor Analysis are as follows.

In the teacher sample, the calculations are as the follows: the comparative fit index (CFI) of the three-component scale=1.00; goodness of fit index (GFI)= 0.93; normed fit index (NFI) = 0.96; the relative fit index (RFI) = 0.95. The fit goodness index ranges from 0 to 1, and values close to 1 indicate good fit (Hooper, Coughlan & Mullen, 2008). The reliability of the scale was examined with the Cronbach Alpha coefficient. Cronbach Alpha coefficient was obtained as 0.92.

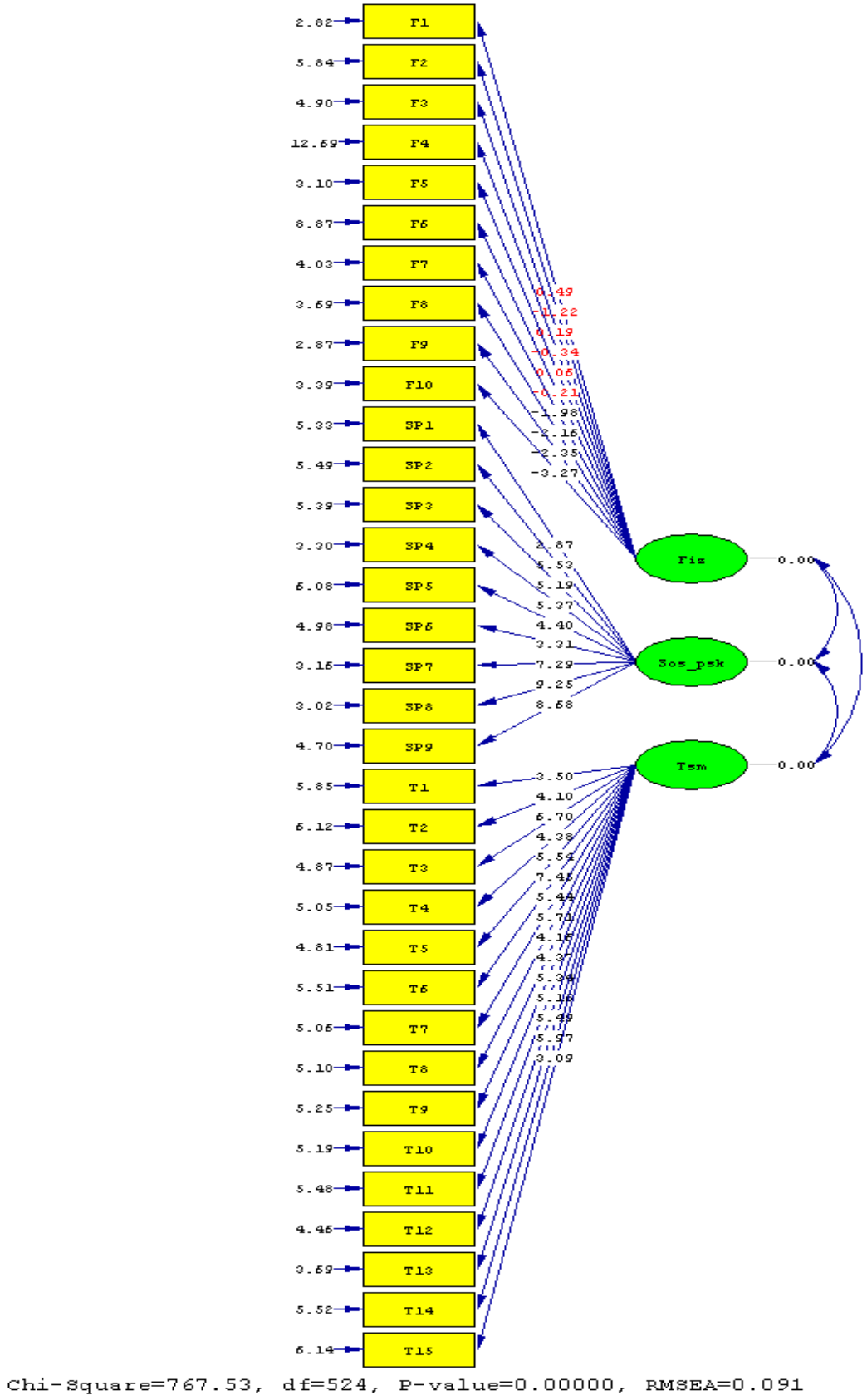

Figure 1. Roadmap graphic related to the factor-load values of scale items of teachers' opinions.

Table 4.

Reliability Values of Teacher Opinion Scale

Item number	Item-Total Correlation	Cronbach Alpha Coefficient	Number of Items
phy.prob.s7	.374		
phy.prob.s8	.305	0.57	4
phy.prob.s9	.312		
phy.prob.s10	.439		
soc.psy.s1	.526		
soc.psy.s2	.642		
soc.psy.s3	.630		
soc.psy.s4	.658		
soc.psy.s5	.568	0.88	9
soc.psy.s6	.500		
soc.psy.s7	.671		
soc.psy.s8	.778		
soc.psy.s9	.599		
trasp.vhc.s1	.500		
trasp.vhc.s2	.407		
trasp.vhc.s3	.571		
trasp.vhc.s4	.552		
trasp.vhc.s5	.531		
trasp.vhc.s6	.594		
trasp.vhc.s7	.606		
trasp.vhc.s8	.580	0.88	10
trasp.vhc.s9	.595		
trasp.vhc.s10	.492		
trasp.vhc.s11	.567		
trasp.vhc.s12	.596		
trasp.vhc.s13	.616		
trasp.vhc.s14	.599		
trasp.vhc.s15	.338		

In the student sample, the calculations are as the follows: the comparative fit index (CFI) of the three-component scale=1.00; goodness of fit index (GFI) = 0.97; normed fit index (NFI) = 0.96; Relative fit index (RFI) = calculated as 0.96. Cronbach Alpha coefficient of the scale was 0.88.

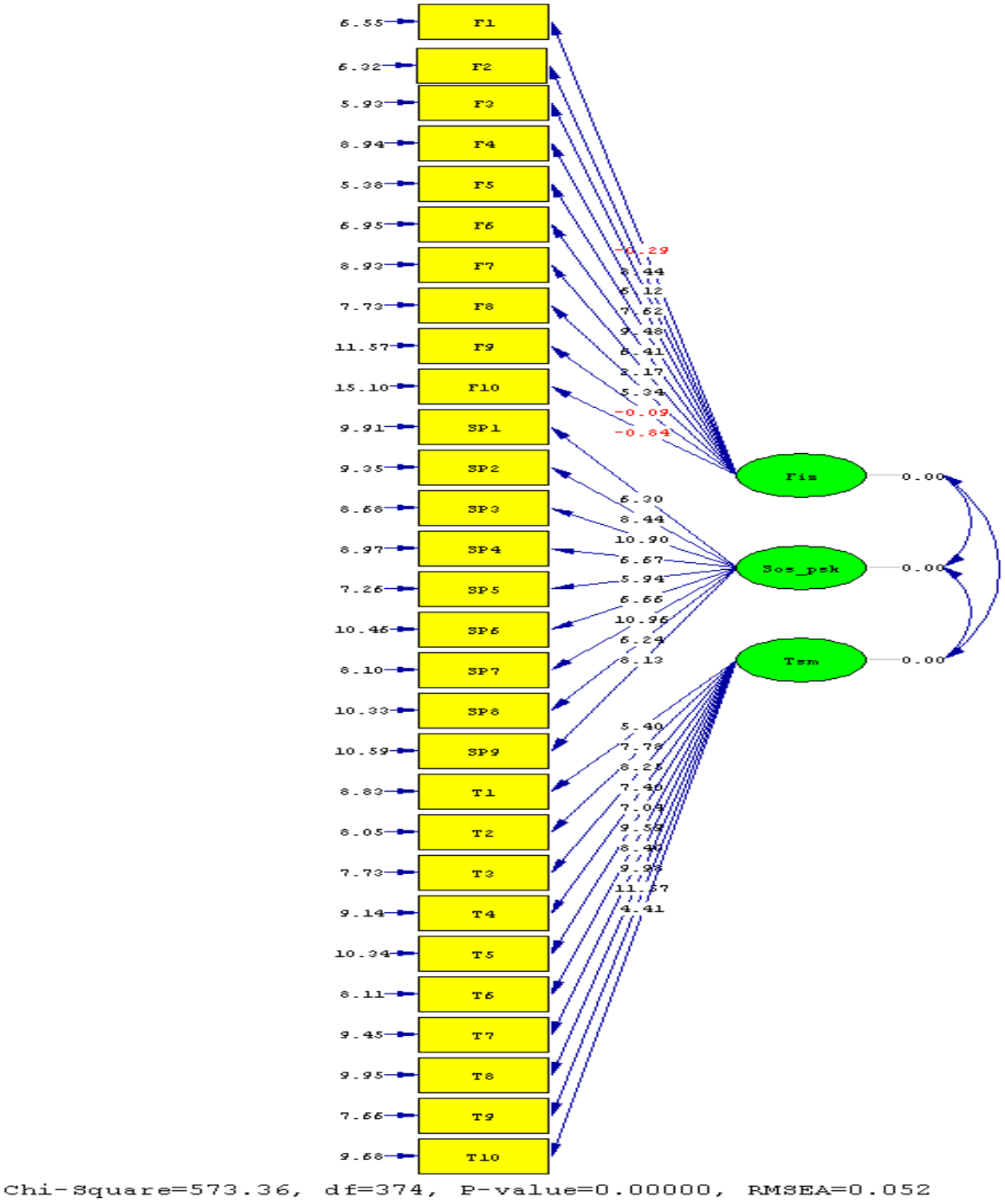

Figure 2. Roadmap graphic related to the factor-load values of scale items of students' opinions.

Table 5.

Reliability Values of Students Opinion Scale

Item number	Item-Total Correlation	Cronbach Alpha Coefficient	Number of Items
phy.prob.s2	.560		
phy.prob.s3	.421		
phy.prob.s4	.450		
phy.prob.s5	.519	0.70	7
phy.prob.s6	.315		
phy.prob.s7	.176		
phy.prob.s8	.434		
soc.psy.s1	.388		
soc.psy.s2	.564		
soc.psy.s3	.632		
soc.psy.s4	.476		
soc.psy.s5	.496	0.81	9
soc.psy.s6	.487		
soc.psy.s7	.556		
soc.psy.s8	.462		
soc.psy.s9	.464		
trasp.vhc.s1	.481		
trasp.vhc.s2	.547		
trasp.vhc.s3	.496		
trasp.vhc.s4	.452		
trasp.vhc.s5	.471	0.83	10
trasp.vhc.s6	.593		
trasp.vhc.s7	.529		
trasp.vhc.s8	.594		
trasp.vhc.s9	.625		
trasp.vhc.s10	.356		

First of all, it has been tested whether the distribution is normal in order to decide the tests to be used in the analysis. In the analysis results, it is observed that the groups show a normal distribution when kurtosis values are between -1.5 and +1.5 (Tabachnick and Fidell, 2013). The fact that the mean score and the median value are equal or close to the equal indicates that the data set is a normal distribution (Büyüköztürk, 2013). It can be seen that the survey data are average, and median values are very close to each other in the Table 6 below. Another method utilized for the normality of distribution is the normal Q-Q plot. It is concluded that the distribution is normal, for the points representing the data of the study in the Q-Q plot appear on a 45-degree-line and in a close position. Therefore, parametric statistics have been used in the analyzes. It can also be seen that the distribution is normal in the Table 6 below.

Table 6.

Normal distribution Test Results

	Teacher Opinions	Student Opinions
N	57	195
Skewness	-.018	-1.26
Kurtosis	-.257	1.32
$\overline{X}$	7.68	8.41
Ss	1.13	1.21
Median	7.45	8.66

Process

The Likert-type scale which was used in the study, was given the sample group was distributed to one by one by the researcher.

Data Analysis

"Teachers' Opinions Scale" and "Students' Opinions Scale" consist of two parts. The first part includes personal information, and the second part includes questions related to the problems faced in the transported secondary school practice in secondary schools, which are the transporting centers. These questions also consist of three sub-categories. In the first category, there are ten statements related to the physical problems. These 10 statements are a 3- point Likert type scale. In this scale, the statement "It is more" is evaluated as 3 points; "it is sufficient" as 2 points and "it is insufficient" as 1 point. In the second category, there are 9 statements related to the social and psychological problems. These 9 statements are a 4- point Likert type scale. On this scale, the statements are assessed as follows: 4 points for the statement "there is no such problem"; 3 points

for “There is partly such a problem”, 2 points for “Most of the time there is such a problem” and 1 point for “there is always such a problem”. In the third category, there are 15 statements in the teachers’ opinions scale and 10 statements in the students’ opinions scale, all of which are related to the problems about transportation and transportation vehicles. These statements are also a 4- point Likert type scale. On this scale, the statements are assessed as follows: 4 points for the statement “there is no such problem”; 3 points for “There is partly such a problem”, 2 points for “Most of the time there is such a problem” and 1 point for “there is always such a problem”.

The data were analyzed with “SPSS for Windows" statistical software. P = 0.05 was accepted as the level of significance. The following statistical analysis were used to analyze the data collected in the research:

•Frequency and Percentage

•Independent groups t test

•One-way analysis of variance (ANOVA)

•Standard Deviation

•Homogeneity

Results

Results Regarding Demographic Variables of Students' Opinions About Tranported Education

For the first sub-problem of the research; independent group t-test results for gender differences in the opinions of students about transported education are presented in Table 7.

Table 7.

Results of the t-Test of the Opinions of the Students Regarding the Scale of Opinions on Transported Education by Gender

Categories	Gender	N	$\bar{x}$	S	sd	t	p *
(Physical problems)	Female	103	1.69	.30	192	2.48	.01 *
	Male	91	1.79	.27			
(Social-psychological problems)	Female	103	3.27	.64	192	1.59	.11
	Male	91	3.40	.51			
(Transportation-vehicle problems)	Female	103	3.29	.62	192	.93	.35
	Male	91	3.37	.57			

Note: * ≤. 05

According to Table 7, there is a significant difference in students' views related to physical problems [t(192)= 2.48, p≤ .050] while social and psychological problems [t(192)= 1.59, p>0.05] and problems related to transport and transportation vehicles [t(192)= .93, p>0.05] are not statistically significant in terms of gender variable. According to the findings, male students ($\bar{x}$ =1.79) have less negative views towards physical problems than female students ($\bar{x}$ =1.69). The table of homogeneity test is given below in order to control the criterion for the feasibility of parametric tests on the data in order to determine the differences of the students' opinions about the transported education by ages.

Table 8.

Homogeneity Test

Categories	Sd	Sd	Level of Significance (p)
(Physical problems)	4	190	.43
(Social-psychological problems)	4	190	.18
(Transportation-vehicle problems)	4	190	.25

As can be seen in Table 8, the data are distributed homogeneously. In this context, it can be said that ANOVA can be used in the analysis of the data.

One-way analysis of variance (ANOVA) was conducted to determine whether student views on transported education differ according to age level, and the results are shown in Table 9.

Table 9.

Variance Analysis (Anova) Results of the Opinions of the Students Regarding the Scale of Opinions on Transported Education by Age

Categories	Age	(N)	($\bar{x}$)	(s)	(F)	(P)	Difference
	10	25	1.84	.23			
	11	38	1.79	.31			
(Physical problems)	12	46	1.79	.25	3.26	.01 *	10> 13
	13	55	1.64	.30			
	14	31	1.69	.33			
	10	195	1.74	.29			
	11	25	3.60	.44			
(Social-psychological problems)	12	38	3.38	.53	1.89	.11	-
	13	46	3.28	.54			
	14	55	3.30	.58			
	10	31	3.20	.73			
	11	195	3.33	.58			
(Transportation-vehicle problems)	12	25	3.52	.47	.79	.52	-
	13	38	3.32	.64			
	14	46	3.31	.55			

Note: * ≤ .05

In the light of the analysis of Table 9, it can be seen that there is a significant difference in opinions of students in different age groups about physical problems in the transported education. This difference is between ages 10 and 13. 13-year-old students have more negative opinions about physical problems, as compared to 10-year-old students ($F(3.26)= .01$; $p\leq .05$).

The table of homogeneity test is given below in order to control the criterion for the feasibility of parametric tests on the data in order to determine the differences of the students' opinions about the transported education in relation to the income level of the family.

Table 10.

Homogeneity Test

Categories	Sd	Sd	Level of Significance (p)
(Physical problems)	4	190	.52
(Social-psychological problems)	4	190	.07
(Transportation-vehicle problems)	4	190	.06

As can be seen in Table 10, the data are distributed homogeneously. In this context, it can be said that ANOVA can be used in the analysis of the data. One-way analysis of variance (ANOVA) was conducted to determine whether student views on transported education differ according to the income level of the family, and the results are shown in Table 11.

Table 11.

Variance Analysis (Anova) Results of the Students' Opinions Regarding the Scale of Opinions on Transported Education by the Monthly Income of the Family

Categories	Monthly Income	(n)	($\bar{x}$)	(s)	(f)	(p)	Difference
(Physical problems)	0 TL - 1000 TL	106	1.76	.31	.83	.50	-
	1001 TL - 2000 TL	54	1.69	.29			
	2001 TL - 3000 TL	26	1.78	.23			
	3001 TL - 4000 TL	5	1.71	.33			
	More than 4000 TL	4	1.60	.24			
(Social-psychological problems)	0 TL - 1000 TL	106	3.26	.63	1.92	.10	-
	1001 TL - 2000 TL	54	3.42	.55			
	2001 TL - 3000 TL	26	3.39	.45			
	3001 TL - 4000 TL	5	3.86	1.12			
	4000 TL'den fazla	4	3.25	.38			
(Transportation-vehicle problems)	0 TL - 1000 TL	106	3.27	.66	.44	.77	-
	1001 TL - 2000 TL	54	3.39	.52			
	2001 TL - 3000 TL	26	3.40	.50			
	3001 TL - 4000 TL	5	3.36	.51			
	More than 4000 TL	4	3.37	.45			

As can be seen in Table 11, according to the results of ANOVA, the difference between physical problems (F (.83) =.50 p>0.05), social and psychological problems (F (1.92) =.10 p>0.05) and problems related to transport and transportation vehicles (F (.44) = .77 p> 0.05) was not statistically significant in students' opinions about transported education by the monthly income level of the family. According to the findings, it can be said that the monthly income levels of the family do not have a decisive role in the opinions of the students on transported education.

Results Regarding Demographic Variables (Professional Seniority, Duration of Duty at the Central School) of Teachers' Opinions About Transported Education

The table of homogeneity test is given below for the purpose of controlling the criterion for the feasibility of parametric tests on the data to determine the differences of the opinions of teachers by the professional seniority as questioned in the second sub-problem of the research.

Table 12.

Homogeneity Test

Categories	sd	sd	Level of Significance (p)
(Physical problems)	3	53	.06
(Social-psychological problems)	3	53	.50
(Transportation-vehicle problems)	3	53	.24

As can be seen in Table 12, it can be said that the data is distributed homogeneously. In this context, it can be said that ANOVA can be used in the analysis of the data.

ANOVA results, which are made to determine whether teachers' opinions about transported education differ by professional seniority, are presented in Table 13.

Table 13.

Variance Analysis (Anova) Results of Teachers' Opinions on the Scale of Opinions on Transported Education by Professional Seniority

Categories	Professional Seniority	(N)	($\bar{x}$)	(s)	(F)	(P)	Difference
(Physical problems)	1-5 years	30	1.84	.33	1.34	.26	-
	6-10 years	20	1.68	.30			
	11-15 years	5	1.80	.11			
	16-20 years	2	2.00	.00			
(Social-psychological problems)	1-5 years	30	2.98	.61	1.04	.37	-
	6-10 years	20	2.71	.64			
	11-15 years	5	2.64	.34			
	16-20 years	2	2.83	.54			
(Transportation-vehicle problems)	1-5 years	30	3.18	.50	2.90	.04 *	1-5 years> 6-10 years 6-10 years> 11-15 years
	6-10 years	20	2.92	.40			
	11-15 years	5	2.64	.21			
	16-20 years	2	2.93	.37			

Note: * ≤. 05

As can be seen in Table 13, according to the results of one-way analysis of variance (ANOVA), there is a significant difference in the opinions of teachers regarding the problems related to transportation and transportation vehicles (F (2.90) = .04; p≤, 05). It can be seen that the teachers, whose professional working year is between 1-5 years, differ from the others. Accordingly, teachers in this group have more positive opinions about the negative effects of transportation and transportation-related problems. In addition, participants with 6-10 years of professional work have more positive views than those with 11-15 years. In general, it is observed that the negative opinions against the problems related to transportation and transportation vehicles increase as the year of professional work increases.

The difference between physical problems (F (1.34) =.26 p>0.05) and social and psychological problems (F (1.04) =.37 p>0.05) in the opinions of teachers about transported education was not found statistically significant.

The table of homogeneity test is given below in order to control the criterion for the feasibility of parametric tests on the data in order to determine the differences in teachers' opinions about the transport education by their duty period at the central school.

Table 14.

Homogeneity Test

Categories	Sd	Sd	Level of Significance (p)
(Physical problems)	3	53	.21
(Social-psychological problems)	3	53	.79
(Transportation-vehicle problems)	3	53	.33

As can be seen in Table 14, it can be said that the data is distributed homogeneously. In this context, it can be said that ANOVA can be used in the analysis of the data.

One-way analysis of variance (ANOVA) was conducted to determine whether teachers' opinions about transported education differ by the duration of duty at the transporting central school, and the results are shown in Table 15.

Table 15.

Variance Analysis (Anova) Results of Teachers' Opinions on the Scale of Opinions related to Transported Education by the Duration of Duty at the Transporting Central School

Categories	Duration of Duty at the Transporting Central School	(n)	($\bar{x}$)	(s)	(f)	(p)	Difference
(Physical problems)	1-5 years	48	1.79	.31	.66	.51	-
	6-10 years	7	1.7 1	.26			
	10 and more	2	2.00	.00			
(Social-psychological problems)	1-5 years	48	2.91	.61	1.04	.21	-
	6-10 years	7	2.47	.53			
	10 and more	2	2.83	.54			
(Transportation-vehicle problems)	1-5 years	48	3.08	.48	2.90	.16	-
	6-10 years	7	2.7 3	.30			
	10 and more	2	2.93	.37			

As shown in Table 15, according to the results of ANOVA, physical problems (F (.66) =.51 p>0.05), social and psychological problems (F (1.04) =.21 p>0.05) and problems related to transport and transportation vehicles (F (2.90) =.16 p>0.05) in teachers' opinions related to

transported education by the duration of duty at the transporting central school was not statistically significant. According to the findings, it can be said that the duration of duty at the transporting central school does not have a decisive role in teachers' opinions transported education.

Discussion and Conclusion

As stated in the study, "Transported Primary Education" is a project started by the General Directorate of Primary Education in the Ministry of National Education in order to ensure equality of opportunity in education, equal access to compulsory eight-year education and to provide quality in education for students living in a mountainous, rural, low-population, distant areas where there is no school or there are multi-grade classes (MNE, 2000). In the 1989-1990 academic year, pilot scheme was implemented in Kırklareli and Kocaeli provinces, and it was decided to be implemented throughout the country thank to its beneficial outcomes. In the 2005-2006 academic year, the necessary tools and allowance for transportation were obtained, and transported primary education started to be implemented throughout the country.

In this study, the opinions of teachers and students of secondary schools that provide transported education in Haymana district of Ankara province were collected with two measurement tools, and the positive and negative features of the project were analyzed in the light of these opinions. The general conclusions of the statistical studies and the sub-problems of the research can be summarized as follows:

- Female students have more negative thoughts about transported education than male students.
- 13-year-old students can be said to have more negative views on physical problems than 10-year-old students. This can be attributed to the younger students' lesser ability to see negativity.
- According to the findings, it is observed that the monthly income levels of the family do not have a decisive role in the opinions of the students on transported education.
- It is observed that the higher professional seniority of the teachers is, the more negative view towards the problems related to transportation and transportation vehicles arise. It can be resulted from the fact that the problems of transportation vehicles have been the same for years and that there have been no changes despite the warnings. Those who have been in their positions for a short time may give more positive views because they think that these negativities may come to an end in the near future.

- It is observed that the duration of duty at the transporting central school do not have a decisive role in teachers' views on transported education.

According to the results of the study conducted in 2002 by Aslı Şan in Seydişehir district of Konya, male students have more negative opinions than female students. It has also been observed that negative opinions about transported education increase as the age of the students increases, and that teachers included in the study tend to regard the problems in the transported education more as the professional seniority increases.

The other study conducted by İyibaş in 2017 has shown that female students have more negative opinions about transported education. In the study conducted by Aydın Timur in 2017, it has been observed that teachers who have been working for more years have negative views on the findings of transportation problem. Similar results have also been found in our study, as can be seen in the previous studies.

This study is able to identify the problems regarding the transported education practice implemented in our country on the basis of students and teachers. Thus, a basis is provided for the improvement of this practice implemented by the relevant units in the Ministry of National Education, which makes this study an important one.

Recommendations

1- Transportation center schools should have a counselor who can listen to the social and psychological problems of the students and deal with them in a multidimensional way.

2- An exchange of ideas should be made between the school administration and teachers in order to solve the problems faced in the transportation center schools.

3- Applying a questionnaire to teachers and students' opinions on the practice of transported secondary school is a good method to reach their opinions, suggestions and complaints about the practice.

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Conflict of Interest

It has been reported by the authors that there is no conflict of interest.

Funding

No funding was received.

Ethical Standards

We have carried out the research within the framework of the Helsinki Declaration.

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