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Examining Teachers' Attitudes and Views Towards Educational Research: Mixed Research*

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ABSTRACT

The primary aim of the research is to examine the attitudes and behaviors of teachers toward educational researches. The research was carried out using mixed methods and an explanatory sequential design. The quantitative study group for the research consists of teachers working in public or public schools affiliated with the Istanbul Provincial Directorate of National Education in the 2021-2022 academic year. The quantitative study group for the research—the convenience sampling method—was determined, and 532 teachers participated in the research. Quantitative data were collected with the "Teacher Attitude Scale Towards Educational Researches (TAASS)" and independent groups were analyzed by t-test and ANOVA analysis. In the qualitative phase, data were collected from 20 teachers determined using the maximum diversity method. "Semi-Structured Interview Form" was used to collect qualitative data, and the content analysis method was analyzed. According to the results, teachers think that educational research is necessary at a "high level". They stated that educational research would contribute to the professional development of teachers in the fields of "teacher training and development", "learning and teaching strategies", "Management and leadership", "curriculum", "assessment-evaluation criteria", "technology use". They also stated that educational research in the fields of "Learning and Teaching Strategies", "Equal Opportunity and Opportunity," and "Family Factor" will contribute to the academic development of students. In this way, the necessity of educational research has been categorized under the themes of "professional development and student academic development".

Keywords:
Educational research, teacher, attitude

1. Introduction

Educational research refers to the scientific and systematic process that aims to discover the reasons for the attitudes and behaviors exhibited by individuals throughout the process and to develop the most accurate solution proposals to the problems that occur in the process (cited from Anderson, 1990, Balcı, 2021). These studies, which are carried out to increase the quality of education, try to find solutions to the problems encountered in practice, based on scientific foundations (Kahraman & Köleli, 2017). According to Beycioglu et al. (2010), educational research is carried out in order to increase the quality of education and to improve teachers' attitudes and awareness towards educational research. What is expected from teachers is to incorporate the results of this research into their practices. In the process of benefiting from the findings of the research, teachers' attitudes towards research are very important (İlhan et al., 2013). Every country aims to raise individuals who are the guarantee of its future. Teachers are directly responsible for this goal. Teachers are located at the center of education (Hacıoğlu, 1990). Besides being the implementer of educational activities,

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it is the key element of the process of adapting to the changes and developments of the age (Beycioğlu, 2009). In today's world, where there is constant change and development, it is necessary for teachers to follow research and reconstruct teaching processes according to research results in order to equip students according to the requirements of this age (Ateş & Yıldırım, 2005). In addition, teachers, like everyone else, should follow the developments in their field and carry what they have learned into the field of practice in order to increase their professional competencies. In this context, educational research stands out as the main source that presents current information to teachers (Şahin & Arcagök, 2013).

Thanks to educational research, teachers will be equipped with the knowledge of their field and gain solution-oriented responsibility, as well as ensuring their own development. The important point here is that by showing a researcher's tendency, students will be able to perform their learning activities effectively (Aksu, 2018). It is believed that determining the attitudes of teachers towards educational research and developing these attitudes in a positive way can ensure that the research culture targeted by our education system is adopted within the system (Çepni & Küçük, 2003).

Educational research is very important for teachers to plan and carry out their 524rofessional, skills, competence, and knowledge, educational processes in the light of these data. In this respect, when the literature is examined, there are Many studies examining teachers' attitudes towards educational research, especially in Turkey (Baş, 2017; Beycioğlu et al., 2010; Çepni & Küçük, 2003; De Jong, 2004; Delihasan, 2019; Ekiz, 2006; Erdamar & Akpunar, 2017; Everton et al., 2000; Gül & Pöse, 2017; İlhan, Şekerci, Sözbilir, & Yıldırım, 2014; İsmail et al., 2019; Kahraman & Köleli, 2017; Potan, 2019; Moutafidou, Melliou, & Georgopoulou, 2012 ; Özgenel & Metlilo, 2021; Papasotiriou & Hannan, 2006; Sadiç, 2019; Savlet, 2017; Şahin & Arcagök, 2015; Uçgun & Ünal, 2015; Yavuz, 2009; Yılmaz, 2020). However, there are a limited number of studies that deal with teachers' views on educational research using a mixed method. The current research is expected to identify teachers' views on educational research and improve understanding between educational research and practice. In the light of this information, it is aimed to determine the attitudes and opinions of teachers towards educational research in this study. For this purpose, answers to the following questions were sought:

- What is the level of teachers' attitudes towards educational research?
- Teachers' attitudes towards educational research: Does it differ significantly according to gender, marital status, education level, age, school type, seniority, and branch status?
- What are the most important concepts that should be investigated in studies in the field of education?
    - Which of these researched concepts contributes to your professional development?
    - Which of these researched concepts contributes to the academic development of your students?
- Do you think that educational research is given sufficient value in the context of teachers and principals? Why?
- Did you make any application in your class by making use of any educational research? Can you give an example?

2. Methodology

2.1. Design

In this study, which examines the attitudes and opinions of teachers towards educational research, a mixed design in which quantitative and qualitative methods are used together was used. In mixed designs, the researcher collects data using both quantitative and qualitative data collection tools, analyzes the data, integrates the quantitative and qualitative findings, and draws inferences (Tashakkori & Creswel, 2007). The research was carried out according to an exploratory sequential design. In the exploratory sequential design, the findings obtained with quantitative data are examined more deeply with qualitative methods and data (Creswell, 2017). In this context, firstly, quantitative data were collected and analyzed. The second step of the study consists of qualitative data collection processes and analysis. Qualitative data were collected and analyzed in order to examine the findings obtained in the first step in depth.

2.2. Participants

The quantitative method study group for the research consists of 532 teachers working in public schools in Istanbul in the 2021-2022 academic year. The quantitative method study group of the research was determined by the convenience sampling method. The purpose of choosing the convenience sampling method is to reach the closest and easiest sample that the researcher can reach. Thus, it is aimed to make the research more economical in many ways (Yıldırım and Şimşek, 2006).

Table 1. *Demographic Data onthe Partcipants of the Quantitative Dimension of the Study*

Veriable	Introductory Features	n	%
Gender	Women	368	69.2 %
	Men	164	30.8 %
Marital Status	Single	203	38.2 %
	Married	329	61.8 %
Age	20-30 Ages	244	45.9 %
	31-45 Ages	188	35.3 %
	46 Ages and above	100	18.8 %
Branch	Turkish	46	8.6 %
	Maths	48	9.0 %
	Science	39	7.3 %
	Social Studies	18	3.4 %
	Foreign language	54	10.2 %
	Religion and Morals	68	12.8 %
	Other (Middle School)	63	11.8 %
	Social Sciences (High School)	50	9.4 %
	NumericalSciences(HighSchool)	24	4.5 %
	Classroom Teaching	92	17.3 %
	Pre-school	30	5.6 %
Education Levels	Undergraduate	450	84.6 %
	Graduate	82	15.4 %
Seniority	0-5 Years	111	20.9 %
	6-10 Years	140	26.3 %
	11-15 Years	96	18.0 %
	16-20 Years	76	14.3 %
	21 Years +	109	20.5 %
Type of School	Primary school	142	26.7 %
	Middle school	263	49.4 %
	High school	127	23.9 %

In the quantitative process of the study, 69.2% of the participants were women, 61.8% were married, and 45.9% were in the 20-30 age range. While 26.3% of the participants have 6-10 years of professional seniority, 49.4% work in secondary schools. The rate of participants with undergraduate degrees is 84.6%, while the rate of participants with graduate degrees is 15.4%. In the branch variable: secondary school other variable; physical education, music, technology, and design; visual arts; and information technologies branches; social sciences (high school) variable includes Turkish language and literature, history, geography, high school guidance, philosophy, and IHHS (Imam Hatip High School) vocational courses branches; and numerical sciences (high school)) variable includes biology, chemistry, physics, mathematics, geometry, and high school informatics branches.

The participants forming the qualitative study group of the research were determined by maximum variation sampling, which is one of the purposive sampling methods. The aim of maximum diversity sampling is to create a relatively small sample and reflect the diversity of individuals who will be parties to the problem in this sample at the maximum level. It is to try to find out whether there are any common or shared phenomena among the various situations and to reveal the different dimensions of the problem according to this diversity (Yıldırım and Şimşek, 2006). Volunteering is important because the participants in the qualitative research will be selected from the participants in the quantitative research part (Creswell, 2017). For this reason, 20 teachers

from the participants who supported the quantitative part were determined for the qualitative sample. Since data was collected in 11 branches for the quantitative sample, at least 1 teacher in 11 branches was included in the qualitative study group to ensure maximum diversity. The gender breakdown of the interviewed teachers is 13 female and 7 male. 15 of the teachers are married, and 5 of them are single. The interviewed teachers are between the ages of 29-50. The types of schools where teachers work include all education levels, including kindergarten, primary school, secondary school, and high school, and the branch distribution varies according to the school type.

2.3. Data Collecting Tools

The "Demographic Information Form" prepared by the researcher was used to learn the demographic information of the participants in the research. Demographic Information Form consists of seven questions. These are: branch, level of duty, age, gender, marital status, professional seniority, and education level.

In the quantitative data collection phase of the research, the "Teacher Attitude Scale towards Educational Research" developed by İlhan, Şekerci, Sözbilir, and Yıldırım (2013), consisting of 20 items and 3 sub-dimensions, was used. The lowest score that can be obtained from the scale is 20, and the highest score is 100. The "Necessity of Educational Research" sub-dimension of the scale consists of 7 items; the "Valuing Educational Research" sub-dimension consists of 6 items; and the "Applicability of Educational Research" sub-dimension also consists of 7 items.

Qualitative data were collected through face-to-face interviews. During the interviews, a "Semi-Structured Interview Form" consisting of 3 open-ended questions created by the researchers was used. The questions determined in the Semi-Structured Interview Form were prepared by considering the sub-dimensions of the quantitative scale used. In addition, questions were formed by the researcher and the advisor who carried out the research in accordance with the validity and reliability criteria and in line with the opinions of field experts. In the semi-structured interview, the researcher prepares the questions to be asked in advance and then asks the questions to the participant. If needed, new questions can be asked and recorded during the interview process (Erdoğan, 2012).

2.4. Analysis of the Data

Quantitative data were transferred to the computer environment by the researchers and analyzed using SPSS 25 (Statistical Package for the Social Sciences). A correction process was applied for 7 reverse-coded items in the scale. In order to control the given normality, the kurtosis and skewness values were checked. The data on the kurtosis and skewness values of the data are given in Table 2.

Table 2. *Kurtosis and Skewness Values of the Data*

	Skewness	Kurtosis
Necessity of the Educational Research	-0.26	0.29
Evaluating the Educational Research	-0.21	-0.30
Applicability of the Educational Research	-0.26	-0.05
Total TAASS	-0.20	0.03

Between +1 and -1, it was determined that the data were normally distributed (Hair et al., 2013). Parametric tests were performed because the distribution of the data showed a normal distribution. In the analysis, descriptive statistics (min.-max. score, percentage, frequency, mean, and standard deviation), a t-test for comparison of paired groups, and an ANOVA test for comparison of more than two groups, were used.

In the analysis of qualitative data, content analysis was applied to the data obtained from the interview questions. Content analysis covers the process of "*combining data close to each other on the axis of certain themes and concepts and arranging them in a way that allows individuals to understand them easily*". The sequence of operations was carried out as follows:

- Coding of the information,
- Inclusion of themes,
- Arrangement of themes and codes,
- Defining and interpreting the findings (Yıldırım & Şimşek, 2006).

2.5. Ethical

This research was carried out with the permission of İstanbul Sabahattin Zaim University Social and Humanities Ethics Committee dated 24/02/2022 and numbered 2022/02.

3. Findings

3.1. Quantitative Findings

The sub-dimensions of teachers' attitudes towards educational research, mean score, and standard deviation values are given in Table 3.

Table 3. *Arithmetic Mean and Standart Deviation Values of Teachers' Attitudes Towards Educational Research0*

Scale	n	($\bar{x}$)	SS	Evaluation
Teacher Attitudes Towards Educational Research Total	532	3.96	0.44	High
Necessity of the Educational Research	532	4.05	0.50	High
Evaluating the Educational Research	532	4.37	0.43	Very High
Applicability of the Educational Research	532	3.51	0.64	High

According to the data in Table 3, the mean score of the teachers' attitudes towards educational research scale ($\bar{x}$=3.96) was found to be at a "*high*" level. In the sub-dimensions of the scale, the necessity of the educational research sub-dimension ($\bar{x}$=4.05) was "high," the value of the educational research sub-dimension ($\bar{x}$=4.37) "*very high,*" and the mean scores of the applicability of the educational research sub-dimensions ($\bar{x}$=3.51) were at a "*high*" level.

The results of the t-test conducted to determine the attitudes of teachers toward educational research according to their gender are presented in Table 4.

Table 4. *T-Test Results for Determining Teachers' Attitudes Towards Educational Research by Gender*

Scale and Sub-Dimensions	Groups	n	(x)	SS	t	p
Teacher Attitude Scale Towards Educational Research	Female	368	79.6	8.22	1.84	0.06
	Male	164	78.1	10.16		
Necessity of Educational Research	Female	368	28.6	3.24	2.02	0.06
	Male	164	27.9	4.14		
Evaluating the Educational Research	Female	368	26.2	2.46	-0.00	0.99
	Male	164	26.2	3.00		
Applicability the Educational Research	Female	368	24.8	4.38	1.99	**0.04**
	Male	164	23.9	4.67		

According to the data in Table 4, it was found that there was no significant difference between the gender variable and the mean scores of teachers' attitudes towards educational research and the mean scores of the Necessity of Educational Research and Evaluating the Educational Research sub-dimensions (p>.05). It was found that there was a significant difference in the mean score of the gender variable and the Applicability the Educational Research sub-dimension (p<.05), while the mean score of Male teachers (x=23.9) was significantly lower than the mean score of female teachers (x=24.8).

The t-test findings for determining the teachers for educational researches according to their marital status are given in Table 5.

Table 5. *T-Test Results for Determining Teachers for Educational Research According to their Marital Status*

Scale and Sub-Dimensions	Groups	n	Avg. (x)	SS	t	p
Teacher Attitude Scale Towards Educational Research	Single	203	78.6	8.83	-1.11	0.26
	Married	329	79.5	8.91		
Necessity of Educational Research	Single	203	28.1	3.67	-1.20	0.23
	Married	329	28.5	3.47		
Evaluating the Educational Research	Single	203	26.1	2.65	-0.92	0.35
	Married	329	26.3	2.62		
Applicability the Educational Research	Single	203	24.4	4.47	-0.71	0.47
	Married	329	24.7	4.50		

When Table 5 is examined, it is concluded that there is no significant difference between the marital status variable and the mean scores of teachers' attitudes towards educational research and the mean scores of the scale sub-dimensions (p>.05).

The t-test findings for determining teachers' attitudes towards educational research according to their education levels are presented in Table 6.

Table 6. *T-Test Results for Determining Teachers' Attitudes Towards Educational Research According to Education Levels*

Scale and Sub-Dimensions	Groups	n	Avg. (x)	SS	t	p
Teacher Attitude Scale Towards Educational Research	Undergraduate	450	79.1	8.83	-0.41	0.68
	Graduate	82	79.5	9.21		
Necessity of Educational Research	Undergraduate	450	28.4	3.51	0.20	0.83
	Graduate	82	28.3	3.78		
Evaluating the Educational Research	Undergraduate	450	26.2	2.65	-0.37	0.70
	Graduate	82	26.3	2.59		
Applicability the Educational Research	Undergraduate	450	24.5	4.48	-0.75	0.45
	Graduate	82	24.9	4.53		

When Table 6 is examined, it is concluded that there is no significant difference between the level of education variable and the mean scores of teachers' attitudes towards educational research and the mean scores of the scale sub-dimensions (p>.05).

The results of the test conducted to determine whether the attitudes of teachers towards educational research show a significant difference according to their age are given in Table 7.

Table 7. *ANOVA Results for Determining Teachers' Attitudes Towards Educational Research by Age*

Scale	Groups	n	(x)	SS		PT	F	p
Teacher Attitudes Towards Educational Research Total	A-Age 35 and below	244	79.5	8.95	Between G.	2	0.32	0.72
	B-Age 36-45	188	78.9	8.73	Within G.	529		
	C-Age 46 +	100	78.8	9.03	Total	531		
Necessity of Educational Research	A-Age 35 and below	244	28.4	3.60	Between G.	2	0.11	0.89
	B-Age 36-45	188	28.3	3.46	Within G.	529		
	C-Age 46 +	100	28.5	3.63	Total	531		
Evaluating the Educational Research	A-Age 35 and below	244	26.3	2.71	Between G.	2	0.23	0.78
	B-Age 36-45	188	26.1	2.55	Within G.	529		
	C-Age 46 +	100	26.1	2.63	Total	531		
Applicability the Educational Research	A-Age 35 and below	244	24.8	4.69	Between G.	2	0.67	0.50
	B-Age 36-45	188	24.5	4.35	Within G.	529		
	C-Age 46 +	100	24.2	4.26	Total	531		

When Table 7 is examined, it is concluded that there is no significant difference between the age variable and the mean scores of teachers' attitudes towards educational research (p>.05).

The findings of the ANOVA analysis conducted to determine the attitudes of teachers towards educational research according to the type of school they work in are given in Table 8.

When Table 8 is examined, it is concluded that there is no significant difference between the school type variable and the mean scores of teachers' attitudes towards educational research and the mean scores of the scale sub-dimensions (p>.05).

Table 8. *ANOVA Results for Determining Teachers' Attitudes Towards Educational Research by Type of School They Work*

Scale and Sub-Dimensions	Groups	n	(x)	SS		KT	F	p
Teacher Attitude Scale Towards Educational Research	Primary School	142	79.8	7.98	Between G.	2		
	Secondary School	263	78.6	9.39	Within G.	529	1.12	0.32
	High School	127	79.6	8.73	Total	531		
Necessity of Educational Research	Primary School	142	28.6	3.26	Between G.	2		
	Secondary School	263	28.2	3.60	Within G.	529	0.97	0.37
	High School	127	28.6	3.75	Total	531		
Evaluating the Educational Research	Primary School	142	26.2	2.43	Between G.	2		
	Secondary School	263	26.1	2.76	Within G.	529	0.61	0.54
	High School	127	26.4	2.60	Total	531		
Applicability the Educational Research	Primary School	142	25.0	4.04	Between G.	2		
	Secondary School	263	24.3	4.83	Within G.	529	1.08	0.34
	High School	127	24.6	4.21	Total	531		

The results of the test conducted to determine whether the attitudes of teachers towards educational research show a significant difference according to their seniority are given in Table 9.

Table 9. *ANOVA Results for Determining the Attitudes of Teachers Towards Educational Research by Seniority*

Scale	Groups	N	(x)	SS		KT	t	p	Difference
Total Attitude Towards Education Research	A-5 years and below	111	81.0	7.67	Between G.	4	1.98	0.09	--
	B-10 years	140	78.7	9.39					
	C-11-15 years	96	77.7	8.86	Within G.	403			
	D-16-20 years	76	79.2	8.85					
	E-21 years +	109	79.0	9.21	Total	407			
Necessity of Educational Research	A-5 years and below	111	28.9	2.94	Between G.	4	1.30	0.26	---
	B-10 years	140	28.1	3.97					
	C-11-15 years	96	27.9	3.35	Within G.	403			
	D-16-20 years	76	28.5	3.54					
	E-21 years +	109	28.5	3.71	Total	407			
Evaluating the Educational Research	A-5 years and below	111	26.6	2.48	Between G.	4	1.22	0.30	--
	B-10 years	140	26.0	2.93					
	C-11-15 years	96	26.0	2.46	Within G.	403			
	D-16-20 years	76	26.0	2.55					
	E-21 years +	109	26.4	2.59	Total	407			
Applicability the Educational Research	A-5 years and below	111	25.6	4.24	Between G.	4	2.43	**0.04**	**A>C**
	B-10 years	140	24.6	4.61					
	C-11-15 years	96	23.8	4.79	Within G.	403			
	D-16-20 years	76	24.8	3.95					
	E-21 years +	109	24.1	4.54	Total	407			

When Table 9 is examined, it is concluded that there is no significant difference between the variable of professional seniority and the mean scores of teachers' attitudes towards educational research (p>.05). It was found that there was no significant difference between the sub-dimensions of the scale, the necessity of educational research and valuing educational research, and the professional seniority of the teachers, but there was a significant difference between the applicability sub-dimension mean score (F=2.43, p<0.5) and the professional seniority of the teachers (p). <.05). A post-hoc test was performed to determine between which groups there was a difference. Before performing the post-hoc test, the homogeneity of the variances was checked, and it was determined that the variances were homogeneously distributed. As a result of the Tukey test, it was found that the applicability point averages of the teachers with 5 years or less of professional

seniority (x=25.6) were significantly higher than the average scores of the teachers with 11-15 years of professional seniority (x=23.8).

The results of the test conducted to determine whether the attitudes of teachers towards educational research show a significant difference according to their branches are given in Table 10.

Table 10. *ANOVA Test Results Between Mean Teachers' Attitude Scores Towards Educational Research and Branch Variable*

Scale and Sub Dimer	Groups	n	Avg. (x)	SS		KT	F	p	Difference
Total Attitude Towards Education Research	1. Turkish	46	77.2	11.28	Between G.	10	1.31	0.21	--
	2. Maths	48	78.7	8.71					
	3. Science	39	81.0	8.11					
	4. Social Studies	18	77.8	9.46					
	5.Foreign Language	54	78.7	9.04					
	6. Religion and Morals	68	81.3	8.11	Within G.	521			
	7. Secondary School other	63	77.4	9.53					
	8. Social Sciences (HighS.)	50	80.6	8.77					
	9. Numerical Sciences (High School)	24	77.8	8.85					
	10.class teaching		79.0	8.17	Total	531			
	11. Preschool Teaching	30	80.1	7.22					
Necessity of Educational Research	1. Turkish	46	27.6	4.23	Between G.	10	1.45	0.15	--
	2. Maths	48	28.2	3.67					
	3. Science	39	29.5	2.73					
	4. Social Studies	18	27.6	3.62					
	5.Foreign Language	54	27.7	3.65					
	6. Religion and Morals	68	28.8	3.43	Within G.	521			
	7. Secondary School other	63	28.3	3.49					
	8. Social Sciences (HighS.)	50	29.2	3.68					
	9. Numerical Sciences (High School)	24	27.5	3.64					
	10.class teaching	92	28.3	3.52	Total	531			
	11. Preschool Teaching	30	28.8	2.77					
Evaluating the Educational Research	1. Turkish	46	26.3	3.21	Between G.	10	0.53	0.86	--
	2. Maths	48	26.1	2.67					
	3. Science	39	26.5	2.51					
	4. Social Studies	18	26.3	2.70					
	5.Foreign Language	54	26.0	2.30					
	6. Religion and Morals	68	26.2	2.74	Within G.	521			
	7. Secondary School other	63	26.1	2.91					
	8. Social Sciences (HighS.)	50	26.6	2.42					
	9. Numerical Sciences (High School)	24	25.8	2.79					
	10.class teaching	92	26.3	2.45	Total	531			
	11. Preschool Teaching	30	25.5	2.39					
Applicability the Educational Research	1. Turkish	46	23.4	5.36	Between G.	10	2.51	**0.00**	**6>1 6>7**
	2. Maths	48	24.3	4.40					
	3. Science	39	25.0	5.45					
	4. Social Studies	18	23.9	4.35					
	5.Foreign Language	54	24.9	4.40					
	6. Religion and Morals	68	26.3	3.65	Within G.	521			
	7. Secondary School other	63	23.0	4.95					
	8. Social Sciences (HighS.)	50	24.8	4.31					
	9. Numerical Sciences (High School)	24	24.6	3.93					
	10.class teaching	92	24.4	4.01	Total	531			
	11. Preschool Teaching	30	25.7	3.63					

When Table 10 is examined, it is concluded that there is no significant difference between the branch variable and the teachers' attitude score towards educational research (p>.05). However, in the Applicability of Educational Research sub-dimension, it was found that there was a significant difference between the branch variable and the Applicability of Educational Research point average (F 2.51, p<0.05). A post-hoc test was

performed to determine between which groups there was a difference. Before performing the post-hoc test, the homogeneity of the variances was checked, and it was determined that the variances were homogeneously distributed. As a result of the Tukey test, it was found that the mean score of religious culture and ethics teachers (x=26.3) was significantly higher than the mean score of other branches in secondary schools (x= 23.0) and the mean score of Turkish teachers (x=23.4).

3.2. Qualitative Findings

The data obtained in the qualitative part was first transferred to the digital environment. All data has been read multiple times before coding. While coding, the answers given to each question were reviewed one by one, and simple coding was done by giving a label to the information that could answer the research questions. The codes were grouped to form sub-themes and then themes. The original form of the data was preserved, and a detailed analysis was made and supported with direct quotations. In direct quotations, code names are given to the participants. In order to determine to which teacher the opinions and expressions expressed by the teachers belonged, codes such as "P1" and "P2" were added to the end of the expressions in quotation marks. "P" indicates participant, and "1" indicates that the teacher is the first teacher interviewed during the qualitative research phase. Teachers who made similar statements were coded as (P5, P9,...) in parentheses. Expert opinions were consulted for the sub-themes. Necessary corrections were made to the sub-themes based on expert opinions, and the data were tabulated. At the last stage, definitions and interpretations were made for the findings presented in tabular form. All the codes that were reached were reviewed using the triangulation method with a group of three field experts, and the codes (> .70) obtained by the expert were included in the research. For this reason, the percentage agreement formula was used to determine the reliability of the analysis. The agreement percentage is obtained with the formula “Confidence=Agreement / (Agreement + Disagreement) x 100” (Miles and Huberman, 1994). The frequency, codes, sub-themes, and themes reached as a result of the analysis of the question "What are the most important concepts to be investigated in studies in the field of education?" are shown in Table 11.

Table 11. *Themes and Frequencies of the Most Important Concepts Considered Necessary by Teachers in Studies in the Field of Education*

	Themes	Sub-Themes	Codes	f
Concepts that Regarded Necessary to Research	*Professional Development*	*Education and Development of Teacher*	factors affecting academic achievement (1), content knowledge (6), researcher identity (1), nature of science (1), scientific literacy (3), children's literatüre (1), child psychology (2), multiple intelligences concept (1), language education (1), equipped teacher (3), being open to development (3), following current issues (1), in-service training (7), pre-service training (1), idealistic teacher (1), Graduate education (3), vocational education (1), teacher training (7), love of profession (2), teacher camps (1), teacher happiness (6), teacher silence (1), teacher problems (1), organizational citizenship behaviors (2), classroom management (1), communication skills (3), communication competence (1), collective teacher competence (2), performance activity (1), projects (1), lifelong learning (2), development of skills of 21st century(1),	69
		Learning & Teaching Strategies	21st century skills (6), language education (1), educational therapy (1), STEM studies (1), lifelong learning (1), learning by experiencing (1), practical aspects of lessons (1), readiness (2), collaborative approach (1), consumption and recycling (1), reading habits (1), education through games (1), student interest (1), learning environments (1), diversification of learning paths (6), self discipline (2) , positive discipline (2), self-control (2), free thinking ability (2), self-efficacy (3), montessori (1), meeting with nature (2), sustainable living (1)	41
		Management and Leadership	ideal administration (1), administrative equipment (1), school happiness (1), organizational climate or organizational culture (4), conflict (2), solution-oriented management (1), leadership, meritorious administration (1), unqualified leadership (2), management (2), communication skill (3), task-oriented administration (1), development of leadership skills (1), ideal leadership understanding (1), motivation (1), justice in the organization (1), ethical values(1), visionary manager (1), mobbings (1)	26
		Curriculum	curriculum density (8), course hours (1), job status (1), plan (1), Schedule (1), time constraints (1), class sizes (1)	14

	Assessment-Evaluation Criteria	Assesment and evaluation (4), alternative solutions (4)	8
	Usage of Technology	technology dominance (3), technology addiction (2), usage of technology (2)	7
Academical Development of the Student	*Learning & Teaching Strategies*	physical activities (1), scientific literacy (1), multiple intelligences (3), development of thinking skills (2), behavioral education (6), language education (3), togetherness with natüre (1), educational therapy (1), activities (1), readiness (1), goal orientation (1), communication ways (1), misconceptions (1), quality of boks (1), use of materials (1), reading habits (1), education with games (2), learning and teaching strategies (1), reward and punishment (1), self-efficacy (1), project-based education (2), team culture (1), learning by doing (1), development of 21st century skills (1), productivity (1), talent discovery (1), effective communication (3), technology education (3)	44
	Equality of Opportunity and Possibility	individual education (3), perception towards lessons (2), equality of opportunity (8), improvement of physical environments (2), vocational high schools (1), physical inadequacy of school (1), insufficient playgrounds (1), exam-centered education (4), physical structure of the classroom (1), social environment (1), crowds (3), insufficient material (1)	28
	Family Factor	family education (8), family view on education (1), family socio/economic status (2), conscious family (2), school-family balance (1), technology knowledge (1), parent academies (3), parent education level (1)	19
Total			256

According to Table 11, in the interviews with the teachers, 8 sub-themes were reached within two themes. Teachers, respectively; Learning and Teaching Strategies (85), Teacher Education and Development (69), Equal Opportunity and Opportunity (28), Management and Leadership (26), Family Factor (19), Curriculum (14), Assessment Criteria (8), Use of Technology (7) consider it necessary to conduct research on its sub-themes.

During the interviews with the teachers, the sub-themes indicated in the table were reached. Some of the teachers' opinions on these are as follows:

"*Necessary methods and techniques should be known for the development of century skills*" P2 (P4, P12, P13, P14, P17, P19).

"For learning and teaching in education to be effective, teachers need to know different ways. Teaching the lessons in this way will also contribute to the development of teachers." P20 (P4, P5, P6, P12, P13, P14, P16, P18).

"Knowing the new generation student training strategies is effective in the academic development of students" P4 (P14).

"Learning should be carried out in alternative ways. Not every student has the same opportunity, so learning paths should be diversified" P8 (P9, P18, P16).

"Teacher education should be investigated first. Both as pre-professional and professional status. How do teachers develop themselves? Does he start this profession willingly or unwillingly? Otherwise, what effect will this have on the profession? Because this is important for our future" P3 (P2, P8, P14).

"Following current issues is important. We should follow the studies and developments in the field. The willingness of the teacher to encourage lifelong learning is important" P8 (P14).

"The concept of equality of opportunity and opportunity should be explored. Do students from all over our country have equal conditions? Can they receive education with equal opportunities? What are the disadvantages of this situation and how can we, as teachers, eliminate this situation?" P20.

"Equality of conditions is something I am sensitive to. I was born in Afyon, I grew up in Afyon. When I became a teacher and came to Istanbul, I saw that the conditions offered to me when I was a student were not the same as those of the students in Istanbul. The unequal conditions should be examined. Studies should be conducted on the conditions that students are exposed to" P18 (P8, P11, P20).

"How should the ideal leadership understanding be? This is a very important issue because we adapt to whoever is in charge of us." P7 (P4).

"For me, the administration is the unit that determines the teacher's comfort zone. It is the unit that guides the teacher or helps him along the way. It is important for the professional development of the teacher that the administration is well-equipped, has administrative knowledge, and has knowledge of human psychology" P3 (P4, P9, P13, P14, P19).

"The concept of family should be examined; the most important building block of education is family. Education is not just about school. There should be a balance between school and family. The family is especially important in the academic development of the student. Teachers change. Children from culturally developed families are more open to reading and development. The child does what he sees. For this reason, family has a great deal of importance in academic development. How is family education and development going? What is the family's view of education? Must be known" P3 (P4, P6, P12, P14, P15, P16, P19, P20).

Time or curriculum should be explored. In a 40-minute class hour, the time we can capture the attention of a middle school child is about 15 minutes. So the curriculum needs to be adjusted accordingly. " P11 (P1, P12, P13, P19, P20).

"There are problems with curriculum and classroom management. There are problems with the overcrowding of the classrooms and the cultivation of the crops. These hinder the professional development of the teacher" P1.

"The dimension of evaluation in education should be investigated. It should be ensured that the evaluation is included in the whole process" P20.

"I read a book about the end of reward and punishment practice in the 70s. It is a method still used today. In the book, it was explained in pages why this method was wrong. Even though the reward sounds positive, it has the same effect as punishment in children's minds. After learning this, I uninstalled the reward and punishment app. I got really tangible returns" P6 (P5).

"I think that the process should be managed with only books, which are insufficient technological tools for children at the age of alpha" P4.

"Every day, the actions on the phone, computer, and smart board—in short, in technology—are getting more complicated. Our learning rate also decreases over time. In this respect, training on technology is important" P10 (P19).

"*The concept of family should be examined; the most important building block of education is family. Education is not just about school. There should be a balance between school and family. The family is especially important in the academic development of the student. Teachers change. Children from culturally developed families are more open to reading and development. The child does what he sees. For this reason, family has a great deal of importance in academic development. How is family education and development going? What is the family's view of education? Must be known*" P3 (P4, P6, P12, P14, P15, P16, P19, P20).

After the analysis of the questions, *"Do you think that educational research is given sufficient value in the context of teachers and principals? Why?"*, 75% (15 teachers) of the interviewed teachers stated "*I don't think*" and 25% (5 teachers) stated "*I think*". The reasons for this situation, according to the opinions of the teachers, are shown in Table 12.

Table 12. *Themes and Frequencies of Opinions Obtained on the Reasons for Giving Sufficient Value to Educational Research*

	Positive Sub-Themes	Codes	f	Negative Sub-Themes	Codes	f
Evaluating the	*Teacher Competence*	academic literacy level (1), researcher (6), following researches (2), individual differences (1), importance of doctorate (1), being sensitive (1), being development-oriented (6), consultation (1), cooperation (2), personal development (3), getting out of comfort zone (1) , post-language development (1), professional development (1), desire to learn (1),	35	*Teacher Incompetence*	not having academic language (1), lack of research culture (5), not being development oriented (1), not being idealistic (1), being job oriented (2), withdrawing oneself (2), postgraduate stagnation (1), not reading (3), routinizing(1), laziness(1)	18

	demand (1), reflecting in practice (2), Graduate (4)				
System Improvement	example of successful countries (1), the necessity of change (1), the importance of education (2), the importance of different ideas (1), in-service training (9), adequacy of opportunities (1), cooperation between MEB-YÖP (1), discussions (1), student participation (1), increasing teacher motivation (1), private school policy (1), developing policies (1), importance of projects (1), parent involvement (1), innovative understanding (2), orientation (6)	31	*Systemic Inadequacies*	task load (1), failure to reach targets (1), target-current shortage (1), inadequacy of in-service training (1), insufficient opportunities (2), workload (1), curriculum density (1), learned helplessness (1), systemic problems (2), monotonous system (1), being closed to innovations (1), lack of direction (1), top down system (1), time constraint (1), lack of time (1).	17
Executive Competence	being a researcher (1), principals with a scientific point of view (1), conscious principal (1), equipment (2), educational level effect (2), development-oriented (1), leadership characteristics (2), principal effect (1), principal competence (2), school atmosphere (4), demands (1), having vision (2), influence of new style principals (1), orientation (6)	27	*Troubles Related to Research*	academic language (1), remaining as research (1), research not being presented (1), evaluated (1), lagging behind (1), not being informed (2), involving confusion (1), not coming to the field (2), not being applied in the classroom (2), being theoretical (2), being insufficient (1)	15
Expectations about Research	understanding the researches (1), finding the right methods (2), raising awareness (2), being informed (1), validity should not be ignored (1), interesting researches (1), easy Access (1), qualified studies (1), addressing the field (1), shedding light on the problems (2), understanding the results (2), presentation of results (1), practical studies (2)	9	Executive Incompetence	not being a researcher (1), task-oriented (3), apathy (1), being undergraduate level (1), incompetence of principals (1)	7
Total		112	Total		57

Some examples of these 4 sub-themes created as a result of the interviews with the teachers are as follows;

"*Individual differences come to the fore. There are educators who are concerned about development. They pursue and research them or take part in these platforms, but as in every profession, I do not think that those who think only to teach the course and fill the time add value. But especially young teachers are doing a good job. I think they value this research. Of course, opportunities are also important*" P17 (P7, P8, P11, P13 P15, P16, P19).

"*We all have learned helplessness. There is an understanding that no matter what we do, the education system will not change, everything will remain in writing. In addition, there is a time constraint at the point of application. We withdraw our pennies. We do not trust science. I'm trying to look at the studies done, especially in my graduate process, but it can be lazy in practice. The density of the curriculum is effective at this point*" P12 (P1, P2, P9, P17, P18).

"There are studies, but there is a problem in reaching the teacher. In this sense, journals containing articles and scientific studies on education in both local and central organizations should be made available to teachers, and their access to all parts of the education community should be facilitated" P1 (P5, P7, P8, P12, P16).

"*The tendency of principals to improve themselves also affects the teacher. The activity of the administration in this sense will also involve the teacher in the process*" P3 (P8, P11, P19).

"It remains just on a research basis. We publish the article, and that's all. If someone could explain the content of that article. Okay, our reading level is low, we don't like to read, but there are actually a lot of topics that interest us. There's a lot to explore in those articles. The person who wrote the article should present the results to the

teachers. Research seems to have been done a little bit and is lagging behind. Promoting policies can be demonstrated. The presentation of research results can create awareness. We should also have easy access to research. What we've reached also seems confusing" P16.

Have you applied any educational research in your classroom? Can you give an example? The findings and comments obtained in this context are as follows. 14 of the 20 teachers in the sample stated that they practiced in the classroom environment according to educational researches, and 6 of them stated that they did not practice according to these researches. In other words, while 70% of teachers benefit from educational research in their classroom practices, 30% do not benefit from educational research in their practices. The applications made by the teachers in their classrooms by making use of educational researches are shown in Table 13.

Table 13. *Findings Regarding the Educational Research Conducted by the Interviewed Teachers*

	Applications
1	*Assesment-Evaluation Techniques*
2	*Project Based Education*
3	*Montessori*
4	*Reggio Emilia Approach*
5	*Sustainable Living(Recycling)*
6	*The Right Usage of Technology*
7	*Designing Education Materials*
8	*STEM*
9	*Misconceptions in Physics*
10	*Different Techniques for Girls and Boys*
11	*Web 2.0 Tools*
12	*Designing Educational Material*
13	*Educational Games*
14	*Critical Reading Skill*
15	*Systematic Literature Review*

*Some of the teachers who stated that they were practicing by making use of the researches mentioned more than one method or technique.

Some of the answers to the third research question are as follows:

"*I provide project-based education. I also use drama techniques because they are related to my course and because of the benefits and importance of drama. I think it is effective that I have received training in this field*" P7 (P4).

"*There was a study on misconceptions in physics. I examined it in depth. I tried to cover the aforementioned concepts with the methods described in the lesson. It was very useful, or because I gained awareness, I took more care with the work. Sometimes such concepts that we think everyone can easily understand are actually not understood. It was a lot of fun with this work*" P10.

"*I applied my graduate research in my classroom. We planned education and training with Web 2.0 tools in one of my classrooms. In the other class, we taught lectures without Web 2.0 tools. There was a significant difference in the students with whom we used these tools. In particular, their interests and desires increased, and they became more attractive. We designed games. We made math cute. We progressed from a simple level to a difficult level with games*" P12.

"I did not apply one-to-one research results, but I saw the effects of extracurricular teacher-student bonds and one-to-one communication. Communication should be sincere and strong. This affects academic success and career" P15.

4. Conclusion and Discussion

In the study, it was revealed that teachers' attitudes towards educational research were at a high level. In addition, it was determined that teachers found educational research highly necessary, valued educational research very highly, and had a high level of optimism that these researches were applicable. When the literature was examined, studies paralleling these results were found (Gül and Köse, 2017; Erdamar and Akpunar, 2017; Kotan,2019; Özgenel and Metlilo,2021). However, different findings are also encountered. Çepni and Kucuk, 2003; İlhan et al., 2010; Şahin and Arcagök, 2015; Uçgun and Ünal, 2015; Gül and Köse, 2017; Head, 2017; Savlet, 2017; Delihasan, 2019; Sadıç, 2019; Yilmaz, 2020; Özgenel and Metlilo, 2021). As a result,

when the results of this research and the studies in the literature are examined, it has been revealed that teachers consider educational researches necessary, attach great importance to these researches, and think that educational research is applicable in educational settings. These results were also supported in the qualitative phase of the study. Teachers have positive attitudes towards educational research. This result of the research is a pleasing situation in the information age we live in and promises hope for the future of our education system.

In the study, it was found that there was no significant difference according to the gender of teachers in terms of their attitudes towards educational research and believing and valuing the necessity of these researches. However, at the point of applicability of the educational research, it was determined that male teachers had more negative attitudes than female teachers. In other words, female teachers think that educational research is more applicable than male teachers. However, there are also studies reporting that male teachers have more positive attitudes than female teachers in educational research (Erdamar & Akpunar, 2017; İsmail et al., 2019; Kahraman & Köleli, 2017; Yavuz, 2009). However, it should be noted that there are many studies on educational research in which no significant gender difference was found (Baş, 2017; Beycioğlu et al., 2010; Delihasan, 2019; Ekiz, 2006; Gül and Köse, 2017;Kotan, 2019; Sadıç, 2019; Yılmaz, 2020). Although it was revealed that the attitudes of the teachers towards educational research were the same in terms of the gender variable and that both female and male teachers believed that educational research was necessary and valued these studies, it was determined that male teachers had a more negative attitude than female teachers in terms of the applicability of the educational research. At this point, it is thought that the number of female teachers in the teaching profession and the fact that they benefit from the scientific field more than male teachers make them effective.

It was determined that teachers' attitudes towards educational research did not differ significantly according to their marital status. Similarly, in the study conducted by Kotan (2019), there was no significant difference between marital status and teachers' attitudes towards educational research. Of the 532 teachers participating in the research, 203 are single and 329 are married. In line with the current sample, it was concluded that marital status is not a factor affecting teachers' attitudes towards educational research. The number of studies dealing with the marital status variable in determining attitudes toward educational research is very small. In order to be able to make a clear statement on this subject, more studies are needed to compare the marital status variable and the attitude of teachers towards educational research.

It has been determined that teachers' attitudes towards educational research do not show a significant difference according to their education level. Among the researches in the field, Kotan (2019); Similarly, in the studies conducted by Delihasan (2019) and Sadıç (2019), no difference was found in terms of education level. There are studies in which the difference is in favor of teachers with graduate education (Baş, 2017; Delihasan, 2019; İlhan et al., 2010; Şahin & Arcagök, 2015; Yılmaz, 2020). Yavuz (2009) concluded that teachers and administrators with undergraduate education are more interested in educational research than teachers and administrators with graduate education. The education level of the teachers participating in the research is divided into two groups: undergraduate and graduate. 450 of the teachers are at the undergraduate level, and 82 of them are at the graduate level. According to the present study, it was concluded that education level is not a factor affecting teachers' attitudes towards educational research. This situation is expected for graduate teachers. When the sample is examined in line with the analysis of qualitative data for teachers at the undergraduate level, three situations emerge. First of all, it was concluded that some of the teachers are taking graduate education; secondly, that some teachers work in projects and schools with high academic success; and thirdly, that participation in competitions and projects organized by provincial and district national education directorates is effective in shaping their researcher attitudes.

It was determined that there was no significant difference between the teachers' attitudes towards educational research and the age variable. Likewise, in the study conducted by Özgenel and Metlilo (2021), no difference was found in the age of teachers or their attitudes towards educational research. Studies reporting that there is a significant difference in terms of the age variable belong to Yavuz (2009) and Kotan (2019). While Yavuz (2009) concluded that teachers aged 46-55 are more interested in educational research than teachers in other age ranges, in Kotan (2019) found that the opinions of teachers in the 20-25 age group regarding the applicability of educational research are similar to those of teachers in the 26-30 age group. It was concluded

that it was significantly higher than the teachers in the study. As a result of the literature review, it has been seen that the number of studies dealing with two variables is quite low. It is thought that the findings obtained in the researches do not have a consistency, and researches using different methods can illuminate this inconsistency.

It was determined that there was no significant difference in the attitudes of teachers towards educational research in terms of school type. When the literature is examined, there are studies that reach similar findings (Baş, 2017; Ekiz, 2006; Özgenel & Metlilo, 2021; Yılmaz, 2020). However, in the study conducted by Yavuz (2009), it was concluded that teachers working in primary schools were more interested in educational research than teachers working in secondary schools. It has been observed that the number of studies comparing the attitude toward educational research with the school type variable is quite low. Although different findings are encountered among the limited studies, it is necessary to increase the number of studies dealing with these variables in order to reach a general conclusion.

It was found that there was no significant difference between the variable of professional seniority and teachers' attitudes toward educational research. It was seen that believing in the necessity of educational research and having professional seniority in evaluating the research did not make a difference, but there was a significant difference in believing in the applicability of the research. It has been revealed that the attitudes of teachers with a seniority of 5 years or less towards the applicability of educational research are significantly higher than the attitudes of teachers with a professional seniority of 11-15 years. In other words, teachers with a professional seniority of 5 years or less think that these studies are more applicable than teachers with 11-15 years of experience. When the literature is examined; In the study conducted by papasotiriou and Hannan (2006), teachers with a seniority of 3-7 years represent a higher rate than teachers with a seniority of 18-34 years in terms of benefiting from educational research; In the study conducted by Erdamar and Akpunar (2017), according to the variable of seniority, teachers who are new to the profession (1-10) approach educational research more positively than teachers with middle seniority (11 years and above); In the study conducted by Baş (2017), it was concluded that the participants with 1-5 years of experience in terms of the variable of seniority had a more positive attitude compared to the participants with 6-10 years and 11-15 years of experience. There are many studies reporting that there is no difference in terms of professional seniority in teachers' attitudes towards educational research (Beycioğlu et al. 2009); Delihasan, 2019; Ekiz, 2006; Kotan, 2019; Özgenel and Metlilo, 2021; Uçgun and Unal, 2015; Yilmaz, 2020). It is thought that besides the excitement and idealism of teachers who have just started their profession, studies on scientific research in pre-service education are also effective.

It was found that there was no significant difference between the branch variable and teachers' attitudes towards educational research. It was determined that there was a significant difference between using only the branch variable and believing in the applicability of the educational research. It has been concluded that the attitudes of the Religious Culture and Moral Knowledge teachers towards the applicability of educational research are significantly higher than those of other branches and Turkish teachers in secondary schools. According to the research findings in the literature, it is seen that there are studies that do not have a significant difference in terms of the branch variable (Ekiz, 2006; Gül and Köse, 2017; Sadıç, 2019; Uçgun and Ünal, 2005; Sadıç, 2019; Yılmaz, 2020). However, in the research conducted by Yavuz (2009), it was found that teachers in preschool, special education, and classroom teaching branches were more interested in educational research than other branches; In the study of Şahin and Arcagök (2015), it was concluded that classroom teachers follow the researches more frequently; and Özgenel and Metlilo (2021) concluded that the attitudes of vocational teachers in Kosovo towards educational research are higher than those of primary school and branch teachers. As a result, it is thought that one of the reasons why the attitudes of religious culture and ethics teachers, which emerged at the point of believing in the applicability of educational research, are significantly higher than the attitudes of other branches and Turkish teachers in secondary schools, is because of the studies of the General Directorate of Religious Education, according to the data obtained from the qualitative interviews. In addition, according to the data obtained from the qualitative interviews, all of the teachers from different branches believe and value the necessity of educational research, and most of them benefit from these studies in the educational environment. In the literature, it has been observed that comparisons of certain (restricted) branches with educational researches are generally made. In order to reach a general conclusion, it is thought

that the number of studies in which multi-branch comparisons are made for educational researches should be increased.

In this sub-title, quantitative and qualitative research results were discussed and evaluated together, and they are listed as follows:

Teachers, who have a high attitude towards the necessity of educational research, called attention to the importance of 8 subjects in the interviews and stated that there is a need for educational research on these subjects. Teachers see educational research on the subjects of "teacher training and development", "*learning and teaching strategies*", "*management and leadership*" "*curriculum*", "assessment-evaluation" and "technology use" as necessary for their professional development. Likewise, a significant number of empirical studies have been found in the literature supporting these statements of teachers. Studies, teacher training and development (Ayaz, 2016; Çepni & Küçük, 2003; Demiralay & Karadeniz, 2008; Özgenel; 2019), learning and teaching strategies (Demirel, 2006; Şahin; 2010), management and leadership (Ataklı, 1992; Bilgivar, 2018; Ekinci, 2010; Erdoğan, 2019; Özgenel & Aktaş, 2020), curriculum (Cincioğlu, 2021; Karatepe et al., 2004; Marulcu & Doğan, 2010; Özpolat, 2013), assessment and evaluation (Çakar, 2004; Çoruhlu et al., 2009; Daniel & King, 1998; Erdemir, 2007; Turgut, 1997), the use of technology (Kurtoğlu & Seferoğlu, 2013; Odabaşı & Kabakçı, 2011; Uşun, 2006) and expressing their contribution to the professional development of teachers. they have brought. As a result, it is thought that current research on these six subjects and the consideration of these research results by teachers are necessary for their professional development and will provide positive contributions to teachers.

Teachers consider educational research in the fields of "*learning and teaching strategies*", "*equality of opportunity and facility*," and "*family factor*" necessary for the academic success of students. In the literature, learning and teaching strategies (Çelik, 2013; Erden, 2005; Dikbaş & Hasırcı, 2008), equality of opportunity and opportunity (Berberoğlu & Kalender, 2005; Çelikkol & Avcı, 2017; Dinçer & Kolaşin, 2009; Özbaş et al. 2013; Empirical research on the family factor (Dam, 2008; Keçeli-Kaysılı 2008); Özer, 2020, Şişman, 2020; Tan, 1987; Tezcan, 1997, drew attention to the importance of these issues by showing parallelism with the statements of teachers and found that they contributed to the academic success of students. has revealed. As a result, it is thought that current research in these three fields and the implementation of these research results by the relevant circles will contribute positively to the academic success of the students.

Secondly, teachers who have a very high attitude toward evaluating educational research drew attention to the issues they stated under the headings of teacher competence, improvement of the system, managerial competence, and expectations for research in order to give the necessary value to these studies. Empirical studies supporting the points expressed by teachers in the literature (Çepni & Küçük, 2003; De Jong, 2004; Delihasan, 2019; Ekiz, 2006; Erdamar & Akpunar, 2017; İlhan et al., 2010; Şahin & Arcagök, 2015; Yılmaz, 2020) were found. Therefore, it is thought that if the issues gathered under these four headings are taken into consideration by the relevant circles, necessary studies are carried out, and concrete steps are taken, sufficient value will be given to educational research in the context of teachers and principals.

Third, most of the teachers who have a positive attitude towards the applicability of educational research stated that they benefit from it and use it in their practices, and that teaching in line with these researches has positive contributions to the education-teaching process in many ways. Similar statements emerged in the studies of Moutafidou, Melliou, and Georgopoulou (2012). However, contrary findings have been reported in some studies (Baş, 2017; Çepni & Küçük, 2003; Papasotiriou & Hannan, 2006; Savlet, 2017; Uçgun & Ünal, 2015; Yılmaz, 2020). In most of the studies, results have emerged indicating that educational research is not applicable. It is thought that the teachers in the universe and the sample were effective, based on the positive findings of this study.

As a result, it has been revealed that teachers consider educational researches necessary, attach great importance to these researches, and think that educational research is applicable in educational settings. This result of the research is a pleasing situation in the information age we live in and promises hope for the future of our education system. As a result of the opinions of the teachers who make use of the educational researches and literature review, the implementation of these researches in the education-teaching process helps the teachers to reach their professional satisfaction, to become competent, and to reach the goal by teaching the lessons in an interactive and immersive way to ensure that the students are active in the lessons and to learn

effectively and meaningfully. It has been seen that it has an important role in contributing to the formation of a collaborative understanding in the classroom and helping both teachers and students to enjoy the process. In line with the interviews, it has been observed that the teachers, whether they see these researches as necessary and value them and reflect them in their practices, have a postgraduate education or have a postgraduate degree and work in project schools. The teachers stated that the regional differences in which the schools are located and the equality of opportunity should be taken into account when conducting educational research; otherwise, although the researches are important, problems are encountered at the point of implementation.

According to the research findings, teachers think that educational research indirectly contributes to the academic success of students. Based on this finding, determining whether teachers' attitudes towards educational research have an effect on students' academic success can be considered important in terms of supporting the finding.

In addition, teachers stated that they have a positive attitude towards the application of educational research and that they apply these researches in the classroom environment. However, the desired success cannot be achieved in the national and international (PISA, TIMSS, etc.) exams. Qualitative and quantitative research can be done to reveal the reasons for this inconsistency.

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