

## Comparison of the physical education & sports teachers' educational research attitudes with other teachers

Fatih Özgül<sup>1</sup>, Murat Kangalgil<sup>2</sup>, Rahmi Yıldız<sup>3</sup>

<sup>1</sup>Sports Sciences Faculty, Giresun University, Turkey

<sup>2</sup>Sports Sciences Faculty, Dokuz Eylül University, Turkey

<sup>3</sup>Ministry of National Education, Sivas, Turkey

### Article Info

#### Article history:

Received Feb 2, 2021

Revised Jun 13, 2021

Accepted Jun 23, 2021

#### Keywords:

Attitude  
Educational research  
Physical education and sports  
Teacher

### ABSTRACT

The aim of this research was to compare the attitudes of physical education and sports teachers and other branch teachers towards educational research. The sample group of the study was determined by convenient sampling method. The data of the study were collected from 304 teachers in different fields (152 female, 152 male; 102 of them are in 23-29 age group, 131 of them are in 30-36 age group and 71 of them are above 37 years). In the research, "Attitude Scale for Educational Researches" was used. The Cronbach Alpha value of the scale was calculated as .87. In the analysis of the data, SPSS (ver.22.0) program was used. Since the data were normally distributed (Kolmogorov-Smirnov), t test, ANOVA and Tukey test were applied and level of significance taken as .05. The total scores of the teachers were compared according to some variables in the study. As a result that the teachers' attitudes towards educational researches found to be a high level in the study. The female teachers' attitudes were found to be higher than the male teachers' towards educational research. The attitudes of the teachers were compared in terms of the branches towards educational researches and there was not found any significant difference between them.

*This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.*



### Corresponding Author:

Fatih Özgül  
Sports Sciences Faculty  
Giresun University  
Gaziler, Prof. Ahmet Taner Kışlalı Cd., 28200 Giresun Merkez/Giresun, Turki  
Email: fatih.ozgul@giresun.edu.tr

## 1. INTRODUCTION

Educational research in the development of an ethnicity and society plays an important role in the development of the education system. In addition, the production of practical studies related to the teaching and training processes can only be carried out with active involvement of the teachers in the research process. Topics have recently been discussed among educational researchers, as the teachers in our country do not benefit from educational research, do not conduct research in classroom practices, and have negative attitudes towards existing research [1], [2].

When researchs on attitudes of teachers towards educational research is examined, it can be seen that studies have been carried out either to analyze attitudes towards scientific research in general or to analyze the educational research only [2]-[7]. It is known that in many researches, teachers are generally away from educational researches [8], [9]. It is often the case that teachers are involved in the data collection phase of research [10]. It was emphasized that teachers did not take benefits of the current education studies [11], [12], and they had some negative attitudes towards educational researches [13]-[15]. Related with this

topic; in a descriptive study conducted with teacher candidates, prospective teachers' attitudes towards scientific researches were found to be high [4]. In another study entitled "teachers' opinions about scientific research studies", a great number of the teachers have positive attitudes whereas one third of the teachers have negative attitudes towards such studies [16]. According to another study to examine the opinions of teacher candidates regarding the scientific research process; it has been determined that the concepts related to the scientific research process are not known accurately and precisely by them and that the teachers did not need to conduct research but that scientific researches will be useful for their occupational life [17].

Likewise, Kart and Gelbal [18] tried to determine the factors thought to be effective on the self-efficacy perceptions of teacher candidates' scientific research skills. According to the findings, teacher candidates about scientific research skills; self-efficacy perceptions have the highest level of competence for data collection and reporting, but data analysis and the detection of variables have the lowest adequacy. When the literature generally evaluated, the findings of many studies similar to or different from the ones listed above could be seen. But there is not any example of the physical education teachers' attitudes towards educational research in the literature. In order to increase the quality of education in all areas, it is important to investigate the attitudes of the physical education and sports teachers towards educational research, as well as educational research conducted by researchers in different fields. In this context, it is thought that in this research, examination of attitudes of physical education and sport teachers towards educational research will contribute to the field.

The aim of this research was to compare the attitudes of physical education and sports teachers and other branch teachers towards educational research. The sub-problems that the researcher is looking for answers are: 1) Is there a meaningful difference between teachers' attitudes towards educational research in terms of age?; 2) Is there a meaningful difference between teachers' attitudes towards educational research in terms of gender?; 3) Is there a meaningful difference between teachers' attitudes towards educational research in terms of marital status? 4) Is there a meaningful difference between teachers' attitudes towards educational research in terms of branches?

## 2. RESEARCH METHOD

In this study, the comparison method which is one of the quantitative research designs was used. In comparative studies used to determine the causal relationship between dependent and independent variables, it is tried to determine whether there is a difference between the opinions of two or more groups of any topic, the causes of the situation, the variables affecting these causes or the results of the effects [19]. In this study, general attitudes of physical education and sports and other branch teachers to educational researches were examined and compared according to age, gender, marital status and branch variables.

### 2.1. Sample

The data of the study were collected from 304 teachers in different fields. The sample group of the study was determined by convenient sampling method to save time, money and workload [20], [21]. The demographic characteristics of the participants are given in the Table 1.

Table 1. Demographic characteristics of the participants

Demographic characteristics		f	%
Age	23-29	102	33
	30-36	131	43
	>37	71	24
Gender	Female	152	50
	Male	152	50
Marital status	Single	89	29
	Married	215	71
Branches	Physical education & sports	54	17.7
	English	28	9.3
	Mathematics	30	9.8
	religious culture and moral knowledge	26	8.5
	Turkish language and literature	46	15.1
	Arts	27	8.9
	History	27	8.9
	Science	38	12.5
Total	Social sciences	28	9.3
		304	100.0

## 2.2. Data collection tool

In this research, "Attitude Scale for Educational Researches" developed by Öztürk [22] was used as data collection tool. The results of statistical analysis conducted by researchers who developed a 5-Likert-type scale consisting of 29 items rated "I never agree" (1) and "I totally agree" (5) showed that the items were collected under 8 factors. And the Cronbach Alpha value of the scale was calculated as .87. The highest score can be taken from the scale is 145 points and the lowest score is 29 points. The high scores of the participants show that their attitudes towards educational research are higher and the low scores of them show that their attitudes are lower.

## 2.3. Analysis of the data

In the analysing of the data, SPSS (ver.22.0) program was used. Since the data are normally distributed (Kolmogorov-Smirnov), in the independent groups (significance test of difference between two means) t test, variance analysis (ANOVA) and Tukey test were applied and level of significance taken as .05.

## 3. RESULTS

In this section, the results obtained were examined respectively in the direction of sub-problems of the research. The first sub-problem of the study aims to determine whether there is a meaningful difference in age between attitudes of teachers towards educational researches. For this purpose, it was tested whether or not it differs according to age and the analysis is presented in Table 2.

Table 2. Comparison of scale mean scores according to age groups

Age	N	Mean	Std. Dev.	Min	Max	Result
23-29	102	100.50	12.32	68.00	145.00	F=4.238 p=0.015*
30-36	131	97.04	10.42	73.00	128.00	
>37	71	95.90	10.86	69.00	123.00	
Total	304	97.94	11.31	68.00	145.00	

\*p<0.05 significant

When the age groups compared, there was a significant difference between the teachers' total score averages and the age groups (p<0.05). When the groups compared pairwise, a significant difference was found (p<0.05) between the age groups 23-29 years and >37 years. According to this, the young teachers are so closer than the middle age colleagues in educational research subject in this research.

The second sub-problem of the study aims to determine whether there is a meaningful difference in gender between attitudes of teachers towards educational researches. For this purpose, it was tested whether or not it differs according to gender and the analysis is presented in Table 3.

Table 3. Comparison of scale mean scores according to gender

Gender	N	Mean	Std. Dev.	Min	Max	Result
Female	152	99.25	10.69	68	131	t=2.02 p=0.043*
Male	152	96.36	11.03	69	124	

\*p<0.05 significant

When the total scores of the individuals were compared according to gender, the difference was statistically significant (p<0.05). According to this, educational research attitudes of the female are higher than the male teachers by the professional development orientations.

The third sub-problem of the study aims to determine whether there is a meaningful difference in marital status between attitudes of teachers towards educational researches. For this purpose, it was tested whether or not it differs according to marital status and the analysis is presented in Table 4.

Table 4. Comparison of scale mean scores according to marital status

Marital status	N	Mean	Std. Dev.	Min	Max	Result
Married	215	97.07	11.03	69	131	t=2.13 P=0.038*
Single	89	100.03	11.76	68	124	

\*p<0.05 significant

When the teachers' scores were compared according to their marital status, the difference was found to be significant ( $p < 0.05$ ). According to this, singles have more attitudes than married people towards educational researches.

The fourth sub-problem of the study aims to determine whether there is a meaningful difference in branches between attitudes of teachers towards educational researches. For this purpose, it was tested whether or not it differs according to branches and the analysis is presented in Table 5.

Table 5. Comparison of scale mean scores according to branches

Branches	N	Mean	Std.Dev.	Min.	Max.	Result
Physical education & sports	54	96.87	11.47	70.00	124.00	F=0.56 P=0.931
English	28	101.96	12.97	68.00	120.00	
Religious culture and moral knowledge	26	96.73	9.80	69.00	112.00	
Mathematics	30	96.43	10.40	70.00	118.00	
Turkish language and literature	46	97.65	11.17	83.00	110.00	
Social sciences	28	97.25	11.09	77.00	131.00	
Science	38	97.55	11.13	74.00	124.00	
History	27	95.58	10.57	81.00	116.00	
Arts	27	99.25	9.87	84.00	105.00	
Total	304	97.94		68.00	149.00	

When the mean scores of the teachers are compared according to the branches of them, there was not found any significant difference between them ( $p > 0.05$ ).

#### 4. DISCUSSION

In the current study, attitudes of the teachers towards educational research from different branches were assessed by the Attitude Scale for Educational Researches according to some variables. When the general attitudes of the teachers are examined; teachers' attitudes towards educational researches are generally at a high level. In similar with the current study, there are studies which state that teachers have positive attitudes towards educational research [4], [23]. The teachers' attitudes towards educational research compared by the age groups in the current study and there were found statistically significant differences between the age groups. The young teachers are so closer than the middle age colleagues in educational research subject in this research.

Against this; in his study, Polat [24] determined that researcher participant attitudes generally did not change significantly according to age and other variables. In the current study, obtained results show that the female teachers have more positive attitudes towards educational research than their male peers. In the literature there can be found some studies [4], [24] as supporting this result. On the other hand, studies be encountered that not be different in terms of gender variable [12], [16], [25]. The current study revealed that attitudes of the teachers towards educational research differ according to the marital status of the teachers. Consequently, significant differences were observed according to the marital status. According to this, singles have more attitudes than married people towards educational researches. In the current study, we tried to find the answer whether the teachers' attitudes towards educational research differ according to their branches. When the mean scores of the teachers are compared according to the branches of them, there was not found any significant difference between them. Supporting this result there would be found some studies in the literature [24], [26], [27].

#### 5. CONCLUSION

In this research of which aimed to compare the attitudes of physical education and sports teachers with other branch teachers' towards educational research according to some variables, attitudes found to be high level towards educational research. Although the attitudes of the teachers were at high levels but there was not found any significant differences between them. According to the marital status of the teachers there were found significant differences in favor of the single teachers' attitudes. From this point it can be said that the single teachers have more freedom for educational research than married. In addition the married teachers have more responsibilities such as family, kids, and outgoing. So they could not have time for educational research. Also, in the research the attitudes of the teachers compared according to their genders, female teachers' attitude scores were found significant than male teachers scores.

It can be said that female teachers are more focused on professional development. Also the attitudes of the teachers compared according to their age groups in this study and the younger teachers attitude scores

have found significantly higher than the other age groups. According to this, the young teachers are so closer than the middle age colleagues in educational research subject in this research.

## ACKNOWLEDGEMENTS

This study was presented in the International Balkan Conference in Sport Sciences held on 21-23 May 2017 in Bursa, Turkey.

## REFERENCES

- [1] S. Çepni and M. Küçük, "Determination of the effects of educational research on science teachers' practices: A case study," *The Eurasian Journal of Educational Research*, vol. 4, no. 2, pp. 75-84, 2003.
- [2] T. Everton, M. Galton, and T. Pell, "Educational research and the teacher," *Research Papers in Education*, vol. 17, no. 4, pp. 373-401, 2006.
- [3] R. L. Isakson and R. Ellsworth, "Teachers' attitudes toward educational research: It's time for a change," *The Teacher Educator*, vol. 14, no. 2, pp. 9-13, 1978, doi: 10.1080/08878737809554696.
- [4] O. Korkmaz, A. Şahin, and R. Yeşil, "Candidate teachers' attitude toward scientific research," *International Online Journal of Educational Sciences*, vol. 3, no. 3, pp. 1169-1194, 2011.
- [5] M. A. Öztürk, "An exploratory study on measuring educators' attitudes toward educational research," *Educational Research and Reviews*, vol. 5, no. 12, pp. 758-769, 2010.
- [6] M. Yavuz, "An analysis of the thought of teachers and principals on educational research," *Selçuk University Ahmet Keleşoğlu Journal of Education*, vol. 27, pp. 143-158, 2009.
- [7] D. A. Walker, "A confirmatory factor analysis of the attitudes toward research scale," *Multiple Linear Regression Viewpoints*, vol. 36, no. 1, pp. 18-26, 2010.
- [8] N. İlhan, A. R. Şekerci, Sözbilir, and A. Yıldırım, "Development of teacher attitude scale for educational research: Validity and reliability study," *Western Anatolia Educational Sciences Review*, vol. 4, no. 8, pp. 31-56, 2013.
- [9] M. Küçük, "Applying the in-service action research course program to science teachers: a case study," Unpublished Master's Thesis, Trabzon: Karadeniz Technical University, Institute of Science and Technology, 2002.
- [10] O. De Jong, "Mind your step: Bridging the research-practice gap," *Australian Journal of Education in Chemistry*, vol. 64, pp. 5-9, 2004.
- [11] R. Aydın, H. Şahin, and T. Topal, "Searching of qualification for primary school teacher training in Turkey," *Turkey Social Research Journal*, vol. 12, no. 2, pp. 120-142, 2008.
- [12] Z. Çakmak, C. Taşkıran, and B. Bulut, "Examination of attitudes of social science teacher candidates towards scientific research," *Adıyaman University Journal of Educational Sciences*, vol. 5, no. 2, pp. 287-308, 2000.
- [13] N. Costa, L. Marques, and R. Kempa, "Science teachers' awareness of findings from education research," *Research in Science and Technological Education*, vol. 18, no. 1, pp. 37-44, 2000.
- [14] M. Sarı, "Researcher teacher: An examination of teachers' views on scientific research," *Theory and Practice in Educational Sciences*, vol. 6, no. 3, pp. 847-887, 2006.
- [15] G. Yavuz-Konokman, I. Tanrıseven, and K. Karasolak, "Examination of teacher candidates' attitudes towards educational researches by various variables," *Ahi Evran University Kırşehir Education Faculty Journal*, vol. 14, no. 1, pp. 141-158, 2013.
- [16] Ö. Korkmaz, A. Şahin, and R. Yeşil, "Teachers' opinions about scientific researches and researchers," *Theoretical Education*, vol. 4, no. 2, pp. 109-127, 2011.
- [17] A. Küçüköğlu, A. Taşgın, and N. Çelik, "A review of the teacher candidates' opinions regarding the scientific research process," *Turkey Social Research Journal*, vol. 17, no. 3, pp. 11-24, 2014.
- [18] A. Kart and S. Gelbal, "Determination of teacher candidates' scientific research self-efficacy perceptions by binary comparative judgments method," *Journal of Measurement and Evaluation in Education and Psychology*, vol. 5, no. 1, pp. 12-23, 2014.
- [19] J. Fraenkel, N. Wallen, and H. H. Hyun, *How to design and evaluate research in education*, 8th ed. Boston: McGraw Hill, 2012.
- [20] S. Büyüköztürk, *Manual of data analysis for social sciences*. Ankara: Pegem Academy, 2012.
- [21] J. H. McMillan and S. Schumacher, *Research in education: Evidence based inquiry*, 6th ed. New York, Pearson Education, 2006.
- [22] M. A. Öztürk, "Confirmatory Factor Analysis of the Educators' Attitudes Toward Educational Research Scale," *Educational Sciences: Theory & Practice*, vol. 11, no. 2, pp. 737-747, 2011.
- [23] N. İlhan, M. Sozbilir, A. R. Sekerci, A. ve Yıldırım, "Turkish Science Teachers' Use of Educational Research and Resources," *Eurasia Journal Of Mathematics Science And Technology Education*, vol. 11, no. 6, pp. 1231-1248, 2015.
- [24] M. Polat, "Attitudes of the students towards scientific research of the faculty of education," *Pamukkale University Journal of Social Sciences Institute*, vol. 18, pp. 77-90, 2014.
- [25] D. Ekiz, "Primary school teachers' attitudes towards educational research," *Educational Sciences: Theory & Practice*, vol. 6, no. 2, pp. 373-402, 2006.
- [26] S. Gül and E. Ö. Köse, "Attitudes of Science and Mathematics Branch Teachers towards Education Research," *YYU Journal Of Education Faculty*, vol. 14, no. 1, pp. 700-725, 2017.

- [27] R. Vanderlinde and J. van Braak, "The gap between educational research and practice: Views of teachers, school leaders, intermediaries and researchers," *British Educational Research Journal*, vol. 36, no. 2, pp. 299-316, 2010.

## BIOGRAPHIES OF AUTHORS



Associate Professor at Giresun University, Faculty of Sports Sciences. Working in the Department of Coaching Education. Expert Areas are Sport Pedagogy, Teaching, Learning, Teacher Education and Physical Education.



Associate Professor at Dokuz Eylül University, Faculty of Sport Sciences. Working in the Department of Sports Organization. Expert Areas are Sport Pedagogy, Teaching and Learning, Feedback, Teacher Education and Physical Education.



Teacher at Ministry of National Education. Working at a primary school in Sivas city center. Being an phd student at Çorum Univeristy department of Physical education and sports.