

*Full Length Research Paper*

# Physical education teacher's attitudes towards philosophy of education and technology

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The current study was carried out to find out the attitudes of physical education teachers towards educational philosophy and technology, and to determine the relationship between the philosophy of education that they adopt and their attitudes toward technology. With this aim, the study was conducted on 22 female and 69 male physical education teachers. As a research method, scanning method was employed. In order to collect data, demographic information form, philosophical preference assessment scale, and attitudes towards technology scale were used. To ascertain the independent variables (gender, age, marital status, and years of service) effect, Mann Whitney U, Kruskal Wallis H test, and statistical package for social sciences (SPSS) 15 were employed. In addition, to specify the level of relationship between educational philosophy and attitudes to technology of physical education teachers, Pearson Correlation Analysis was carried out. The significance level was regard as  $p < 0.05$  in the study. When the attitudes of physical education teachers who participated in the study were analysed, the results of the study showed that they are close to "experimental philosophy". Nonetheless, no statistically significant difference between physical education teacher's philosophy of education and attitudes towards technology was found.

**Key words:** Physical education, education, philosophy, philosophy of education, technology, attitude.

## INTRODUCTION

Human beings and the object of education, make up the subject of philosophy; they are regarded as the base of philosophy and education system is arranged based on them (Sönmez, 2005).

Education philosophy is directly associated with philosophy's itself (Büyükdüvenci, 2001). Philosophy is a worldview and an aspect of life. It is an effort to capture the universe entirely. It emphasizes that every human has goals, attitudes and beliefs in their lives, and they create value, understand the life and interpret it as well

as add new value to their life. On the other hand, the philosophy on education is named as educational philosophy and it emerges as different perspectives, active in educational structures (Büyükdüvenci, 2001).

Educational philosophy, in terms of taking part in activities, thinking and being a point of view in educational facilities, is by itself a line of sight. Therefore, bearing in mind that each teacher as an individual are different from each other, it may be said that there can also be differences among their philosophy of education.

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If we briefly mention the most significant elements in education and training, learners, teachers and educational institutions, in other words schools, may come to mind. Knowing the educational approaches of teachers, who constitute one of the most important elements of education and training, learning how they perceive education as well as understanding why and how they teach is one of the most crucial studies that can be done (Guttek, 2001).

Physical education teachers may plan, implicate, monitor and evaluate the training process according to the philosophy of education they ground on. Bringing solutions to the problems that might arise in the training process, making wise decisions and doing appropriate acts make it necessary to know all the values and meanings in the background of them. In this sense, there is a philosophy of education that every teacher should have. This education philosophy determines what is important in the training process. The extents to which philosophy is used as base; the aims, behaviours, content as well as educational and testing status have to comply with the criteria put forward by that philosophy (Sönmez, 2005).

Advances in technology facilitate teaching and learning processes in all areas. Nowadays, it is important to grow people who can reach, arrange, and assess the knowledge and who have communication skills. Thus, teachers must be consciousness of the need to use technology in modern sense of education besides adopting different training philosophy views (Akkoyunlu, 1995).

On the other hand, today, technology is developing rapidly. Perpetual change is both the reason and result of this incredibly fast growing technology. This situation forces teachers to communicate and interact with their surroundings more. The tools and equipments provided by technological change have an important place in achieving the goals of teachers. In this circumstance, teachers are required to keep up with the new technologies and developments, and accommodate themselves around this change.

In literature, although there are many sources of data about teachers' philosophy of education and their attitudes towards technology, it is noteworthy that researches on the relationship between philosophy and attitude are quite few. The study was conducted in order to examine the physical education teachers' educational philosophies and attitudes towards technology. Moreover, it is important in terms of examining the relationship between educational philosophy adopted by teachers and their attitudes towards technology.

## METHODOLOGY

In this descriptive research, descriptive survey model was employed and with the help of Likert-type questionnaires prepared in line with this purpose, the views of the participants were tried to be determined. The scope of the study is composed of physical

education teachers working in the territory of Turkey. As for sample, the study consists of 22 female and 69 male physical education teachers officiating in elementary and secondary schools in the city centrum and districts of Erzincan. In accordance with the permit from Provincial Directorate of National Education, scale form was sent to all the teachers and those 91 physical education teachers who agreed to participate in the study voluntarily and filled in the scale form accurately and completely formed the sample of the study. In the calculation and evaluation of the obtained data, Statistical package for social sciences (SPSS) 15 statistical software was used.

## Data collection

### *Demographic information form*

In this form, questions related to gender, age, marital status and year of service were included. In order to collect data about independent variables, demographic information form, developed by the researcher was used.

### *Philosophical preference assessment scale*

It is a five-point Likert-type (1-strongly agree, 5-strongly disagree) scale with 40 items developed by Wiles and Bondi (1993). The scale consists of 40 items, based on perennialism, idealism, realism, experimentalism and existentialism.

The validity and reliability studies were done by Doğanay and Sarı (2003) and its Cronbach Alpha reliability coefficient was calculated as 81.

### *Attitude towards technology scale*

Attitude towards technology scale is a five-point Likert-type instrument with 37 items, designed by Akbaba (2002). In the reliability study conducted by Akbaba (2002), Cronbach Alfa reliability coefficient was found as 91 (Kısa, 2006).

## Data analysis

In the study, in order to specify whether there was a difference considering the independent variable, Mann Whitney U Test and Kruskal Wallis H Test were performed. In addition, to state level of relationship between philosophy of education and attitudes to technology of physical education teachers, Pearson Correlation Analysis was carried out. The significance level was regard as  $p < 0.05$  in the study.

## FINDINGS

### **Normality analysis**

In order to test the homogeneity of the data, Kolmogorov-Smirnov test's results having been less than 0.05, which is taken into account in cases when n number is over 30, non-parametric test applications were conducted. Test applications were conducted (Table 1). 25% of samples participated in the study aged 21 to 30, 64% were in the age range of 31 to 40 and 11% were over the age of 41. Considering the years of service, 28.6% of participants were between 0 to 5 years, 33% were 6 to 10 years, 26.4 were between 11 to 15 years and 12% were

**Table 1.** Homogeneity test Analyses.

Variable	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	statistic	df	Sig.
Philosophy of education	0.112	91	0.007	0.930	91	0.000
Attitudes towards technology	0.135	91	0.000	0.902	91	0.000

$p < 0.05^*$ .

**Table 2.** Physical education teacher's philosophy of education according to gender variable.

Philosophy of education	Gender	N	$\bar{X}$	Sd	Z	Mann Whitney U	p
Perennial philosophy	Female	22	25.81	3.06	-2.395	501.50	0.017*
	Male	69	28.07	4.01	-	-	
Idealist philosophy	Female	22	25.63	2.62	-.229	734.50	0.819
	Male	69	25.65	3.80	-	-	-
Realist philosophy	Female	22	30.50	3.63	-.033	755.50	0.974
	Male	69	29.69	4.50	-	-	-
Experimental philosophy	Female	22	30.59	4.30	-1.058	645.50	0.290
	Male	69	31.81	4.80	-	-	-
Existential philosophy	Female	22	27.09	4.16	-.950	657.00	0.342
	Male	69	26.31	3.16	-	-	-
Philosophy of education total	Female	22	139.63	12.30	-.905	661.50	0.366
	Male	69	141.55	14.92	-	-	-

found 16 years and above.

According to Table 2, it was found that both female ( $\bar{X}$  =30.59) and male ( $\bar{X}$  =31.81) physical education teachers have "Experimental Philosophy" sub-dimension average score at most. When the results of Philosophical Preference Assessment Scale and Attitude towards Technology Scale were analysed in terms of variables as gender, age, and years of service, statistically no significant difference both in total and in all sub-dimensions was identified.

According to Table 3, statistically no correlation was detected between the scores of philosophy of education and the scores of attitudes towards technology. In other words, no relationship between the educational philosophy of physical education teachers and their attitudes toward technology was established.

## DISCUSSION

According to the research results, it was indicated that among the philosophies of education of both female and male physical education teachers only in "Perennial

Philosophy" the results showed differences ( $p=0.017 < 0.005$ ), yet no difference was determined in other philosophies. Still, when the total scores were taken into account (Kadın  $\bar{X}$  =30.59, Erkek  $\bar{X}$  =31.81), the physical education teachers may be said to adopt Experimentalist Educational Philosophy at most. In the researches done on preservice teachers in different disciplines by Tekin and Üstün (2008) and Duman and Ulubey (2008) it was found that the preservice teachers adopt the Experimentalists Philosophy which is of similar nature with the result of the current study.

In the study, it was identified that both female ( $\bar{x}$  =27.59) and male ( $\bar{x}$  =27.59) physical education teachers have the highest scores in the sub-dimension of adaptation of technology. To put it differently, the physical education teachers' attitudes towards technology can be said to be positive. Although in the researches done on academic staff by Kısa and Kaya (2006) and Yılmaz (2008) adverse findings were determined, in the present study the age variable did not demonstrate any differences on the philosophy of education and attitudes towards technology. This may be explained with the

**Table 3.** The relationship between physical education teachers' philosophy of education and attitudes towards technology.

Variable	Philosophy of education	Attitudes towards technology
Philosophy of education	1	-
Attitudes towards technology	0.082	1

difficulty of changing the habits that the teachers have formed throughout their professional life.

Moreover, it was seen that the marital status of physical education teachers did not present a difference on their philosophy of education and attitudes towards technology. The result of the study was also supported by Kısa and Kaya's (2006) research on the academic staff.

The physical education teachers' years of service did not present a difference on their philosophy of education and attitudes towards technology which is in line with the results of the studies conducted by Doğanay and Sarı (2003), Çoban (2002) and Kısa and Kaya (2006). This may be caused by the physical education teachers' insisting on their past experience and habits.

## Conclusion

In the current research, when mean scores were analysed, no statistical correlation was detected between the physical education teacher's philosophy of education and their attitudes towards technology. Nonetheless, in the literature, the researches done on teachers in different field of studies, opposite results have been obtained.

There are also researches in the literature on school administrators and inspectors except teachers. In those studies, though similar results were found about the relationship between the philosophy of education and age, opposite results were found on the sub-dimensions as adaptation of technology, gender and attitudes towards technology. In the light of these findings, it may be said that the positions of individuals can be effective on their philosophy of education and attitudes towards technology as well as it may be inferred that this issue should be investigated.

## Conflict of Interests

The authors have not declared any conflict of interests.

## REFERENCES

Akkoyunlu B (1995). Bilgi Teknolojilerinin Okullarda Kullanımı ve Öğretmenin Rolü. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 11:105-109.

- Büyükdüvenci S (2001). Eğitim Felsefesine Giriş. Ankara: Siyasal Kitabevi.
- Çoban A (2002). Sınıf Öğretmenliği Öğretmen Adaylarının, Eğitim Sürecine İlişkin Felsefi Tercihlerinin Değerlendirilmesi. Cumhuriyet Üniversitesi Sosyal Bilimler Dergisi. 26(2):311-318.
- Doğanay A, Sarı M (2003). İlköğretim Öğretmenlerinin Sahip Oldukları Eğitim Felsefelerine İlişkin Algıların Değerlendirilmesi. Türk Eğitim Bilimleri Dergisi 1(3):321-337.
- Duman B, Ulubey Ö (2008). Öğretmen Adaylarının Benimsedikleri Eğitim Felsefelerinin Öğretim Teknolojilerine ve İnterneti Kullanma Düzeylerine Etkisi. Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (İLKE). (20):95-114.
- Gutok GL (2001). Eğitimde Felsefi ve İdeolojik Yaklaşımlar. (2. Basım). (Çev. N. Kale). Ankara: Ütopya Yayınevi.
- Kısa B, Kaya H (2006). Hemşire Öğretim Elemanlarının Teknolojiye İlişkin Tutumları. Turk. Online J. Educ. Technol. (TOJET) 5(2). ISSN:1303-6521
- Sönmez V (2005, 8-9 Nisan). *Felsefe ve Spor Eğitimi*. Spor Eğitiminin ve Performansının Felsefi Temelleri Sempozyumu, Manisa.
- Tekin S, Üstün A (2008). Amasya Eğitim Fakültesi Öğretmen Adaylarının Eğitim Süreci Hakkındaki Felsefi Tercihlerinin Tespiti. Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi, 25:145-158.
- Wiles J, Bondi J (1993). Curriculum Development. USA: Macmillan Publishing Company.
- Yılmaz İ (2008). Beden Eğitimi ve Spor Öğretim Elemanlarının Teknolojiye İlişkin Tutumlarının Değerlendirilmesi. *Türkiye Sosyal Araştırmalar Dergisi* 1:135-145.