



Correlation Between Teachers' Philosophy of Education Beliefs and Their Teaching-Learning Conceptions *

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Abstract

The purpose of this study was to examine the correlation between teachers' philosophy of education beliefs and their teaching-learning conceptions. For this purpose, the "correlations survey model" was adopted in the study. The data collection tools used in the study were; "Education Beliefs Scale" (Yılmaz, Altinkurt, & Çokluk, 2011) and "Teaching-Learning Conceptions Scale" (Chan & Elliott, 2004). According to the Pearson moments correlation analysis conducted, it was found positive significant correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions. In this study, it was concluded that contemporary philosophy of education beliefs were correlated with constructivist teaching-learning conception and traditional philosophy of education beliefs were correlated with traditional teaching-learning conception. Also, it was understood that teachers' philosophy of education beliefs was a significant predictor of their teaching-learning conceptions.

Keywords

Philosophy of education beliefs
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Introduction

Giving a short answer to the question "what is philosophy?" seems to be rather difficult. There is not only one definition of it (Sönmez, 2009). The source of philosophy, which is based on the term "philosophia", was formed from the merger of "love" (philia) and "knowledge, wisdom" (sophia) words (Akarsu, 1988). In this regard, the definition of philosophy can be put simply and generally as "love of wisdom" (Bilhan, 1991).

One of the important branches of philosophy in today's world is philosophy of education (Sönmez, 2009). The philosophy of education, which is a branch of philosophy, can be defined broadly as contextualising education with a philosophical attitude or methods. The philosophy of education is understood as a discipline of philosophy which discusses the education, question and analyse its activities and concepts making up the education field (Cevizci, 2009). The philosophy of education, which analyses the concepts specific to the judgements in the education field and examines the structure of other arguments here, concentrates on the basic factors that determines the education (Cevizci, 2012). The approach of the philosophy of education towards people, the goals, the appropriate scope of the education goals, the organisation of teaching-learning and measurement and evaluation processes are affected by philosophical views or streams (Sönmez, 2009). The organisation

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of goals, content, teaching-learning and measurement and evaluation processes of the education system requires a perspective (Wiles and Bondi, 2007). The philosophy of education plays an important role in the determination of educational goals, controlling the eligibility for individuals and the society, and putting out the quality of educational applications. From this aspect, the philosophy of education is in an effort to create a coherent and holistic perspective towards education (Sözer, 2008). At the same time, philosophy takes a crucial place in curriculum development studies because it both reflects thought ways, opinions, and beliefs for a school and affects the goals and the content (Demirel, 2012). Also, the goals of education, content, and teaching-learning methods are shaped by the adopted philosophical view (Sözer, 2008). Indeed, the philosophy of education provides a structure and base for organising school and classroom environments for educators. It helps determining to answer what is the school for, which subjects are valuable, how students learn, and which methods and techniques are being used at school (Demirel, 2012). So, the philosophy of education constitutes a basic mechanism for decisions in regard of education, hence the curriculum (Ornstein & Hunkins, 2013). In other words, there are significant contributions of the philosophy of education in taking the general decisions in terms of education, in the preparation, implementation, evaluation, and the development of the curriculum (Ekiz, 2007). Essentially, a certain view must dominate on the formation of educational policies and the reflection of these on the curriculum itself. The quality of education in a country is to be consistent with the philosophy of education. Therefore, each curriculum development study must be based on certain philosophical view. These studies must be consistent with the society's dominant philosophical viewpoint, available with scientific evidences, and have a solid philosophical view with internal consistency (Demirel, 2012).

As well as the content of teaching is designed within the framework of curriculum, the learning environment, the culture shaped in the classroom, and the methods and techniques applied in teaching-learning process are consisted of teachers' knowledge, skills, opinions, and beliefs. Hence, teachers are proved to make the difference in the classrooms. Although teachers are not educated in light of a certain educational philosophy in their pre-service trainings, they develop some basic educational views and beliefs as a holistic result of their education (Doğanay & Sarı, 2003). Philosophy, which is consisted of these views and beliefs, makes guidance to the teachers in determining the goals, designing the teaching-learning process, and selecting the measurement-evaluation method (Hook, Kurtz, & Todorovitz, 1975; Kelly, 2004; Sönmez, 2009). It may not be a right approach to express that teachers make their teaching activities consciously in the framework of a certain philosophy of education. However, each teacher has a perspective on education and teaching. This perspective and beliefs of teachers affect directly or indirectly on how the teaching in the classroom is carried out (Doğanay & Sarı, 2003). Although teachers' perspectives on education are not within a conscious philosophy of education framework, each teacher adopts a philosophical belief in regard of education and teaching and this philosophy affects teaching and learning process held in the classroom (Duman & Ulubey, 2008). Teaching and learning process demonstrates parallelism with teaching-learning conceptions adopted by teachers (Chan & Elliott, 2004). In other words, teaching-learning conception adopted by teachers directly affects teaching and learning process carried out in the classroom (Baş, 2014).

Teachers' pedagogical beliefs vary a long continuum of considering teaching as a process of knowledge transmission at one end to a process of facilitating students' knowledge construction at the other end (Chan & Elliott, 2004). The notion of teachers' pedagogical beliefs refers to their teaching and learning conceptions in the classroom (Chan, 2003). The conception about teaching and learning refers to the beliefs adopted by teachers about their preferred ways of teaching and learning (Chan & Elliott, 2004). Today, it can be mentioned that there are two general contrary teaching-learning conceptions (Schunk, 2008). These two different teaching-learning conceptions can be expressed as; traditional teaching-learning conception and constructivist teaching-learning conception (Aypay, 2011; Baş, 2014; Bıkmaz, 2011; Duffy & Roehler, 1986; Oğuz, 2011; Şahin & Yılmaz, 2011).

While traditional teaching-learning conception emphasises the transmission of knowledge from teachers to students, which teachers are seen the only authority of knowledge and transmitter of it and students are viewed as passive recipients of knowledge, constructivist teaching-learning conception emphasises teachers as a guide who help students in the construction of knowledge and consider students as active participants of the learning process (Brooks & Brooks, 1999). Constructivist teaching-learning process reveals that knowledge cannot be seen as independent from the individual and meanings belonging to the individual cannot be transferred to others (Phillips, 2000). As one of the teaching-learning conceptions, constructivist teaching-learning conception includes an active process which individuals build meanings by combining their existing knowledge with their new knowledge (Driscoll, 2000). For this reason, knowledge is not a copy of the outside world or a passive absorption from one person to the other in constructivist conception (Özden, 2003). In constructivist conception, student is not a passive recipient of knowledge; in contrast he/she is an active creator of knowledge (Saban, 2004). Learning is seen as a process of meaning construction and the meaning is alleged to be constructed by the student, not directly by instruction (Biggs, 1996). According to constructivist conception, students create the knowledge individually and then reorganise it (Saban, 2004). The most important thing in constructivist conception is not the acceptance of knowledge by the student, it is how the individual makes a meaning from the knowledge he/she gets (Şaşan, 2002). In this sense, students participate in meaning construction processes actively in constructivist learning environments (Fer & Cırık, 2007). In these learning environments, while students are seen as meaning seekers and problem solvers, teachers are evaluated as guides and facilitators in the construction and exploration of meaning by the students (Dunlop & Grabinger, 1996). In this context, the teacher adopting constructivist teaching-learning conception is expected to sustain his/her students learning environments in order to make them have rich learning experiences and be a guide in the meaning construction process to the students (Gagnon & Collay, 2001). Although constructivism is seen as an epistemological view, it is evaluated as a teaching-learning approach today (Aydın, 2012; Fosnot, 1996). While constructivism sees learning as an active process, it underlines the experience in learning as well as learning by making the living (Bakır, 2012). Constructivism, thus, is mostly associated with progressivist philosophy of education based on pragmatic philosophy (Phillips & Soltis, 2004). Besides, constructivism is seen to very closely related with reconstructive philosophy of education belief (Sönmez, 2009). At the same time, existentialist philosophy is also seen to be associated with the constructivist approach in the literature (Cevizci, 2011). Both progressivist as well as reconstructive and existentialist philosophies with their characteristics support constructivism; also, constructivism is fed by these philosophies and draws a projection to teaching and learning.

As one of the other teaching-learning conceptions, traditional conception perceives the teacher as the only source and authority of knowledge in the classroom and students are expected to get all the information presented by the teachers without questioning (Özden, 2003). Hence, knowledge is considered as a passive absorption transferred from teachers to students in traditional conception (Brooks & Brooks, 1999). Learning is also materialises by memorising the information provided by the teacher (Senemoğlu, 2009). At the same time, course books are also very crucial in the classroom based on traditional conception (Demirel, 2012). For this reason, it can be said that the teacher is in the centre and traditional methods of teaching and learning are used in the classroom (Cheng, Chan, Tang, & Cheng, 2009). So, students cannot participate in the learning process actively; they only watch this process in a passive manner (Chan & Elliott, 2004). In classroom based on traditional conception, the participation of students is very limited and students are not allowed to direct the teaching-learning process by themselves. This task is done solely by the teacher (Brooks & Brooks, 1999; Gagnon & Collay, 2001). The teacher, adopting traditional teaching-learning conception, manage the classroom solely himself/herself, does not share the power and authority with anyone, and shape the teaching-learning process only himself/herself (Baş, 2014). Teachers adopting traditional teaching-learning conception try to hear the right from their students instead of seeking meaningful learning in their students. At the same time, these teachers expect their students to demonstrate their memorised knowledge or find the only true answer in their examinations (Ornstein & Hunkins, 2013). Of course,

both the award and the punishment are also considered inevitable phenomena in classroom having such teachers (Cevizci, 2011; Sönmez, 2009). In this state, it can be said that perennialist and essentialist philosophy of education beliefs in terms of their education practices can be defined as traditional (Cevizci, 2011; Erkılıç, 2011; Gutek, 1988; Noddings, 1995). In other words, the teaching and learning conception which is defined as traditional, finds its philosophical foundations in perennialist and essentialist philosophy of education beliefs (Phillips, 2003). Such approaches based on compelling students, seeing them as passive recipients of knowledge, and consider the memorisation of knowledge crucial as located amongst the characteristics of perennialist and essentialist philosophy of education beliefs (Cevizci, 2011; Gutek, 1988).

When the related literature is reviewed, it is seen that there are some studies examining teachers' philosophy of education beliefs (Altınkurt, Yılmaz, & Oğuz, 2012; Çetin, İlhan, & Arslan, 2012; Çoban, 2002; Doğanay, 2011; Doğanay & Sarı, 2003; Duman, 2008; Duman & Ulubey, 2008; Ekiz, 2005, 2007; Geçici & Yapıcı, 2008; Karadağ, Baloğlu, & Kaya, 2009; Kaya, 2007; Tekin & Üstün, 2008; Üstüner, 2008) as well as their teaching-learning conceptions (Aypay, 2011; Baş & Beyhan, 2013; Baş, 2014; Bıkmaz, 2011; Chan, 2003; Chai & Khine, 2008; Cheng et al., 2009; Oğuz, 2011) separately. However, it was not seen any research that teachers' philosophy of education beliefs and their teaching-learning conceptions were examined together in the same study. Therefore, it was not seen any study regarding which philosophy of education beliefs of teachers affect their teaching-learning conceptions. Although there are some views regarding teachers' philosophy of education beliefs are paralleled to their teaching-learning conceptions (Cevizci, 2011, 2012; Demirel, 2012; Ornstein & Hunkins, 2013; Posner, 1995; Sönmez, 2009; Wiles & Bondi, 2007), it can be stated that these views are not based on a research. So, these views are theoretical rather than practical. Such a research may help understating the correlation between teachers' philosophy of education beliefs and their teaching-learning conceptions. At the same time, such a study may also contribute predicting teachers' philosophy of education beliefs for their teaching-learning conceptions as well as understating underlying basic reasons of teachers' classroom practices. Besides, this study is thought to contribute understanding the role of philosophy of education beliefs of teachers in the development of their teaching-learning conceptions and is also perceived to contribute to the understanding of schooling processes. Thus, this study is considered an important step in understanding the role of teachers' philosophy of education beliefs on their teaching-learning conceptions. For this reason, the problem statement of the study is consisted of the question "What kind of a correlation is there between teachers' philosophy of education beliefs and their teaching-learning conceptions?" In light of this problem statement, answers to the following questions are sought in the study:

1. Is there a significant correlation between teachers' philosophy of education beliefs and their teaching-learning conceptions?
2. What is the predictive power of teachers' philosophy of education beliefs for their teaching-learning conceptions?

This study is believed to provide some valuable clues for future education. This study, firstly, tries to investigate the relationship between teachers' philosophy of education beliefs and their teaching and learning conceptions and then bring the relationship between these phenomena out into the open. Constructivist teaching and learning conception keeps an important place in viewpoints that are put forward in regard of future education (Brown, 2006; Hayes, 2007; Strommen & Lincoln, 1992). Constructivism is presented as an approach that will be effective on future education systems in terms of the future projections put forward about teaching and learning. In parallel, it is thought that the investigation in regard of the relationship between teachers' philosophy of education beliefs and their teaching and learning conceptions may shed light on the training of constructivist teachers in the future.

Method

Research Model

In this study, the correlative investigation model was used (Karasar, 2005). This model is one of the most commonly applied models in the related literature (Cohen, Cohen, West, & Alken, 2003). The correlative investigation model is used to determine the correlation between different variables in educational researches (Fraenkel & Wallen, 2009) and aims to identify the existence or level of coordinated change between two or more variables (McMillan & Schumacher, 2006).

Study Group

The study group of the research consisted of volunteering teachers ($n = 215$), selected according to cluster sampling method from three layer groups (high-middle-low socio-economic structure) (McMillan & Schumacher, 2006) of six different public high schools in Niğde province ($37^{\circ}57'N$, $34^{\circ}40'E$) in the central Anatolia region of Turkey. Of the participants, 41.39% ($n = 89$) were men and 58.60% ($n = 126$) were women in the study. Anatolian high school teachers ($n = 96$, 44.65%) constituted the largest group, followed by vocational high school teachers ($n = 78$, 36.28%), and science high school teachers ($n = 41$, 19.07%). With regard to occupational experience, 23 (10.70%) teachers had 1-5 years of experience, 57 (26.51%) teachers had 6-10 years of experience, 77 (35.81%) teachers had 11-15 years of experience, and 58 (26.98%) teachers had more than 16 years of occupational experience in the study. Finally, it was seen that the teachers' ages ranged from 24 to 56 years ($M = 36$, $SD = 2.64$) in the study.

Data Collection Tools

Education Beliefs Scale: In this study, "Education Beliefs Scale" developed by Yılmaz, Altinkurt, and Çokluk (2011) was used in order to determine philosophy of education beliefs adopted by teachers. The Education beliefs scale, which was used to determine teachers' philosophy of education beliefs, was consisted of 40 items with 5-likert type. The Education beliefs scale also consists of five sub-dimensions as; progressivist, existentialist, reconstructive, perennialist, and essentialist philosophy of education beliefs. The confirmatory factor analysis was conducted on the 40-item data found as a result of the exploratory factor analysis. The model showed appropriate values as a result of the confirmatory factor analysis (GFI = .85; AGFI = .83; RMSR \leq .05; RMSEA \leq .05; RMR and SRMR \leq .08; CFI \geq .95; NFI and NNFI \geq .95; PGFI = .75). Cronbach's Alpha values of the scale varied between .70 and .91 in the study (Yılmaz et al., 2011).

Teaching-Learning Conceptions Scale: In this study, "Teaching-Learning Conceptions Scale", developed by Chan and Elliott (2004) and adapted into Turkish by Aypay (2011) was used in order to determine teachers' teaching-learning conceptions. The teaching-learning conceptions scale was consisted of 30 items with 5-likert type. The confirmatory factor analysis was conducted on the data in order to do the item analyses and to sustain the construct validity of the scale. The confirmatory factor analysis results (GFI = .93; AGFI = .91; RMR = .50; RMSEA = .54) revealed that the scale had acceptable values. Cronbach's Alpha value for the total scale was found as .84 in the study. Also, Cronbach's Alpha value for the first sub-dimension (constructivist teaching-learning conception) was calculated as .88 and for the second sub-dimension (traditional teaching-learning conception) was calculated as .83 respectively (Aypay, 2011).

Data Collection

The data of this study were collected from teachers with different branches working in state high schools. While the data of the study were collected by the researcher himself by visiting the schools, the collection of the data lasted for approximately one month. When the researcher visited the schools, he firstly informed the teachers about the purpose of the study and then explained how to fill the data collection tools to them. The application of each data collection tool of the study lasted for one day for each school. A volunteer participation of the teachers in the study was taken into account.

Analysis of Data

In this study, the correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions were calculated by conducting Pearson Product-Moment Correlation technique. Also, multiple linear regression analysis was conducted in order to examine the effects of teachers' philosophy of education beliefs on their teaching-learning conceptions. Prior to the regression analysis, Mahalanobis distance values as well as skewness and kurtosis values were checked in the study (Büyüköztürk, 2010). Data which violated the normality assumption were excluded from the analyses. In this sense, it was seen that there was no values that hamper the linearity and normality assumptions in the data set. Besides, multiple fallout matrix graphic was analysed to see whether the data meets the linearity assumption. The obtained results showed that scatter diagrams, which were performed for standardised residual values and standardised predicted values, define a linear correlation. At the same time, the presence of autocorrelation between variables in the regression analysis was examined and Durbin-Watson value ($D-W = 1.30$) demonstrated that an autocorrelation did not exist between the variables. The data set was also examined in regard of the multicollinearity assumption and it was seen that there was not multicollinearity between the independent variables. Variance inflation factor (VIF) and conditions index (CI) were examined and variance inflation factor values were detected as 1.51-3.04, and conditions index values were found as 1.00-10.45 in the study. Values in regard of variance inflation factor equal to or higher than 10 and values in terms of conditions index equal to or higher than 30 demonstrate multicollinearity (Büyüköztürk, Çokluk, & Köklü, 2011). In this respect, the findings obtained in the study demonstrated that there was not multicollinearity between the independent variables. These examinations showed that the data set was fit for multiple regression analysis so that the related analyses were conducted in the study. In this research, the related statistical analyses were conducted by using SPSS (Statistical Package for Social Sciences) 17.0.

Results

In this part of the study, findings in regard of the effects of teachers' philosophy of education beliefs for their teaching-learning conceptions were presented. For this purpose, the findings in terms of the correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions were given firstly, and then the findings regarding the predictive level of teachers' philosophy of education beliefs for their teaching-learning conceptions were evaluated in the study. The correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions were given in Table 1.

Table 1. Correlations Matrix for Philosophy of Education Beliefs and Teaching-Learning Conceptions

Variables	M	SD	1	2	3	4	5	6	7
Philosophy of Education Beliefs ($n = 215$)									
Progressivist	3.97	10.8	-	.296**	.213**	-.081	.071	.585**	-.117
Existentialist	3.79	11.6	.296**	-	.827**	.047	.066	.431**	.063
Reconstructive	3.89	11.5	.213**	.827**	-	.076	.095	.482**	.100
Perennialist	3.28	9.8	-.081	.047	.076	-	0.24	.132	.226**
Essentialist	3.30	10.2	.071	.066	.095	.024	-	.129	.193**
Teaching-Learning Conceptions ($n = 215$)									
Constructivist	4.33	10.6	.585**	.431**	.482**	.132	.129	-	.178**
Traditional	2.93	6.4	-.117	.063	.100	.226**	.193**	.178**	-

** $p < 0.01$

In Table 1, it was seen that there were high and moderate level of significant correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions. According to the analysis, it was found positive significant correlations between teachers' progressivist ($r = .585, p < 0.01$), reconstructive ($r = .482, p < 0.01$), and existentialist ($r = .431, p < 0.01$) philosophy of education beliefs and their constructivist teaching-learning conception. It was also seen that there were positive significant correlations between teachers' perennialist ($r = .226, p < 0.01$) and essentialist ($r = .193, p < 0.01$) philosophy of education beliefs and their traditional teaching-learning conception. Besides, there were not any significant correlations between teachers' progressivist ($r = -.117, p > 0.01$), reconstructive ($r = .100, p > 0.01$), and existentialist ($r = .063, p > 0.01$) philosophy of education beliefs and traditional teaching-learning conception. Similarly, it was understood that there were not any significant correlations between teachers' perennialist ($r = .132, p > 0.01$) and essentialist ($r = .129, p > 0.01$) philosophy of education beliefs and constructivist teaching-learning conception respectively. These findings indicate that teachers' philosophy of education beliefs are closely correlated with their teaching-learning conceptions. The findings in terms of the regression analysis of teachers' philosophy of education beliefs and their teaching-learning conceptions were given in Table 2.

Table 2. Predictive Level of Philosophy of Education Beliefs for Teaching-Learning Conceptions

Predictive Variable	B	Std. Error	β	t	p
Constant)	26.003	4.363		5.961	.000**
Philosophy	.248	.025	.566	10.022	.000**

$R = .566, R^2 = .320, F(1,213) = 100.447, ** p < 0.01$

Table 2 demonstrates the findings in terms of the prediction level of teachers' philosophy of education beliefs and their teaching-learning conceptions. According to the regression analysis, it was seen that the model was significant as a whole ($F[1,213] = 100.447, p < 0.01$) and philosophy of education beliefs of teachers were correlated significantly with their teaching-learning conceptions ($R = .566, R^2 = .320$). It was understood that teachers' philosophy of education beliefs explained 32% of their teaching-learning conceptions. The result reveals that philosophy of education beliefs overall strongly account for teachers' teaching-learning conceptions at school. The findings of multicollinear regression analysis between the sub-dimensions of philosophy of education beliefs and constructivist teaching-learning conception were given in Table 3.

Table 3. Predictive Level of Philosophy of Education Beliefs for Constructivist Teaching-Learning Conception

Predictive Variables	B	Std. Error	β	t
(Constant)	2.547	3.281		2.776**
Progressivist	.528	.052	.528	10.248**
Existentialist	.414	.087	.431	6.981**
Reconstructive	.399	.082	.425	4.862**
Perennialist	.160	.054	.132	1.943
Essentialist	.117	.057	.053	1.081

$R = .709, R^2 = .502, F(5,209) = 42.153, ** p < 0.01$

Table 3 showed that the findings in regard of the predictive level of philosophy of education beliefs of teachers for constructivist teaching-learning conception. According to the analysis, while the model was significant as a whole ($F[5,209] = 42.153, p < 0.01$), "progressivist" philosophy of education belief ($\beta = .528$) was found out to be the most important sub-dimension in the model that explained the constructivist teaching-learning conception. The relative order of importance of the sub-dimensions in the regression model was seen as existentialist ($\beta = .431$) and reconstructive ($\beta = .425$) philosophy of education beliefs. This philosophy of education beliefs were found out to satisfactorily significant. It was seen that philosophy of education beliefs of teachers explained 50% of the total variance for

constructivist teaching-learning conception in the study ($R = .709$, $R^2 = .502$). Besides, perennialist ($\beta = .132$) and essentialist ($\beta = .053$) philosophy of education beliefs were found to be non-significant for the prediction of constructivist teaching-learning conception. This suggests that constructivist teaching-learning conception adopted by teachers is strongly explained by contemporary philosophy of education beliefs such as progressivist, existentialist, and reconstructive. The findings of multicollinear regression analysis between the sub-dimensions of philosophy of education beliefs and traditional teaching-learning conception were given in Table 4.

Table 4. Predictive Level of Philosophy of Education Beliefs for Traditional Teaching-Learning Conception

Predictive Variables	B	Std. Error	β	t
(Constant)	20.673	2.623		7.882**
Progressivist	-8.04	.041	-.135	-1.951
Existentialist	4.37	.069	.008	.063
Reconstructive	4.97	.066	.089	.759
Perennialist	.131	.046	.188	2.863**
Essentialist	.134	.043	.203	3.081**

$R = .327$, $R^2 = .107$, $F(5,209) = 5.016$, ** $p < 0.01$

Table 4 demonstrated that the findings in terms of the predictive level of philosophy of education beliefs of teachers for traditional teaching-learning conception. According to the analysis, while the model was significant as a whole ($F[5,209] = 5.016$, $p < 0.01$), “essentialist” philosophy of education belief ($\beta = .203$) was found out to be the most important sub-dimension in the model that explained the traditional teaching-learning conception. It was seen that philosophy of education beliefs of teachers explained approximately 11% of the total variance for traditional teaching-learning conception in the study ($R = .327$, $R^2 = .107$). Besides, progressivist ($\beta = -.135$), existentialist ($\beta = .008$), and reconstructive ($\beta = .089$) philosophy of education beliefs were found to be non-significant for traditional teaching-learning conception. This suggests that traditional teaching-learning conception adopted by teachers is strongly explained by traditional philosophy of education beliefs such as perennialist and essentialist education beliefs.

Discussion and Conclusions

The purpose of this study was to examine the correlation between teachers’ philosophy of education beliefs and their teaching-learning conceptions. For this purpose, the correlations between teachers’ philosophy of education beliefs and their teaching-learning conceptions were examined firstly. When the findings of the study were examined, it was seen that there were high and moderate level of significant correlations between teachers’ philosophy of education beliefs and their teaching-learning conceptions. According to the analysis, it was found positive significant correlations between teachers’ progressivist, reconstructive, and existentialist philosophy of education beliefs and their constructivist teaching-learning conception. It was also seen that there were positive significant correlations between teachers’ perennialist and essentialist philosophy of education beliefs and their traditional teaching-learning conception. Besides, there were not any significant correlations between teachers’ progressivist, reconstructive, and existentialist philosophy of education beliefs and traditional teaching-learning conception. Similarly, it was understood that there were not any significant correlations between teachers’ perennialist and essentialist philosophy of education beliefs and constructivist teaching-learning conception respectively. These findings indicate that teachers’ philosophy of education beliefs are closely correlated with their teaching-learning conceptions. When the findings of the study were examined in a deeper context, it was understood that teachers’ philosophy of education beliefs (progressivist, existentialist and reconstructive), which are defined as contemporary philosophy of education beliefs were paralleled to constructivist teaching-learning conception, which is also defined as a contemporary teaching-learning conception. Besides, it was also

seen that traditional philosophy of education beliefs (essentialist and perennialist) of teachers showed parallelism with traditional teaching-learning conception. These findings indicate that philosophy of education beliefs adopted by teachers reflected on their teaching-learning conceptions and shaped their classroom practices in this direction as well. These findings, at the same time, show that philosophy of education beliefs adopted by teachers is in a key role in the development of their teaching-learning conceptions. When the related literature is reviewed, it was not seen any research that teachers' philosophy of education beliefs and their teaching-learning conceptions were examined together in the same study. In other words, it was not seen any study regarding which philosophy of education beliefs of teachers affect their teaching-learning conceptions. Although there are no findings regarding the correlation between teachers' philosophy of education beliefs and their teaching-learning conceptions, most views (Cevizci, 2011, 2012; Demirel, 2012; Doğanay & Sarı, 2003; Gutek, 1988; Ornstein & Hunkins, 2013; Sönmez, 2009; Wiles & Bondi, 2007) indicate that there is a close correlation between teachers' philosophy of education beliefs and their teaching-learning conceptions. Philosophy of education beliefs of teachers functionally affect on how they educate students (Livingston, McClain, & Despain, 1995) and contribute to shape teachers' teaching-learning conceptions. Philosophy of education beliefs adopted by teachers is in a determining position in most respects from the determination of objectives to the arranging of teaching-learning process (Ediger, 2000). Teachers move with some specific beliefs from the determination of objectives to the organisation of teaching-learning process and decide on measurement-evaluation (Doğanay, 2011). Therefore, philosophy of education beliefs adopted by teachers affects classroom practices (Brown & Rose, 1995; Levin & Waldman, 2005; Pajares, 1992) and directs their teaching-learning conceptions (Doğanay & Sarı, 2003). When the related literature is reviewed, it was seen that there were studies which could shed light on the findings of this study. For example, Baş and Beyhan (2013) found significant correlations between teachers' student control ideologies and their teaching-learning conceptions in their study. According to this finding, it was found out that teachers' custodial student control ideology was correlated significantly with traditional teaching-learning conception and humanistic student control ideology was correlated significantly with constructivist teaching-learning conception. In a study carried out by Yılmaz (2009), it was found out a significant correlation between teachers' custodial student control ideology and authoritative classroom management conception. Jones and Blankenship (1972) found significant correlations between teachers' student control ideologies and innovative and entrepreneur classroom practices in their study. These results indicate that contemporary education beliefs or conceptions are closely related with teachers' teaching-learning conceptions. It was also seen in the results of these studies that contemporary beliefs or conceptions adopted by teachers are correlated significantly with contemporary teaching-learning conceptions and traditional beliefs or conceptions are correlated significantly with traditional teaching-learning conceptions.

According to another finding obtained in the study, it was found out that teachers' philosophy of education beliefs were a significant predictor of their teaching-learning conceptions. When looked at generally, it was understood that teachers' philosophy of education beliefs explained 32% of their teaching-learning conceptions. The result reveals that philosophy of education beliefs overall strongly account for teachers' teaching-learning conceptions at school. At the same time, progressivist philosophy of education belief was found out to be the most important sub-dimension in the model that explained the constructivist teaching-learning conception. The relative order of importance of the sub-dimensions in the regression model was seen as existentialist and reconstructive philosophy of education beliefs. This philosophy of education beliefs were found out to satisfactorily significant. It was seen that philosophy of education beliefs of teachers explained 50% of the total variance for constructivist teaching-learning conception in the study. This suggests that constructivist teaching-learning conception adopted by teachers is strongly explained by contemporary philosophy of education beliefs such as progressivist, existentialist, and reconstructive. This finding puts forward that teachers' constructivist teaching-learning conception is explained strongly by such contemporary philosophy of education beliefs as progressivist, existentialist, and reconstructive. Especially, it is seen

very significant that the strongest variable which predicts teachers' constructivist teaching-learning conception is progressivist philosophy of education belief. Because, constructivist conception is seen as complement for progressivist philosophy of education belief (Oliva, 2005). In this regard, it can be stated that progressivist philosophy of education belief shows consistency with constructivist teaching-learning conception. Progressivist philosophy of education belief, which takes its basics from pragmatism, pays attention to individual's experiences and stresses the learning process by letting him/her to make things on their own (Demirel, 2012). While this philosophy of education belief stresses a student-centred teaching-learning process, it also sees the student as an active participant of the learning process and considers the teacher as a guide in this process (Cevizci, 2011, 2012). At the same time, while there is a democratic education understanding in the basics of this philosophy of education belief, it is also essential that cooperative studies amongst students be carried out in teaching-learning process (Gutek, 1988). On the other hand, reconstructive philosophy of education belief as well as progressivist one takes its basics from pragmatism and puts sustaining of democracy and organising the society in this direction to its target (Ornstein & Hunkins, 2013). Existentialist philosophy of education belief, while stressing the freedom of the individual, pays great importance to people. The individual is free and (s)he decides on what they will do throughout their lifetime by themselves in this philosophy of education belief (Sönmez, 2009). The essential purpose in this philosophy of education belief is to develop the individual from all aspects and to sustain his/her self-actualisation (Cevizci, 2011, 2012; Gutek, 1988; Ornstein & Hunkins, 2013; Sönmez, 2009). While constructivist teaching-learning conception as well as the abovementioned philosophy of education beliefs stresses the importance of the individual's freedom sees the individual as an active participant in teaching-learning process and supports a student-centred process in the classroom (Brooks & Brooks, 1999). The basic purpose in constructivist teaching-learning conception is to develop students from all aspects in a democratic atmosphere and sustain their self-actualisations in the end. As a result, philosophy of education beliefs, which are considered as contemporary ones, show parallelism with constructivist teaching-learning conception from most aspects. In this sense, it can be commented that teachers adopting contemporary philosophy of education beliefs are to have constructivist teaching-learning conception. In other words, it can put forward that teachers adopting progressivist, existentialist, and reconstructive philosophy of education beliefs run a constructive understanding in teaching-learning process in the classroom. It can be stated that some findings obtained from the related literature (Baş & Beyhan, 2013; Brown & Rose, 1995; Jones & Blankenship, 1972; Levin & Waldman, 2005; Yılmaz, 2009) coincide with the related finding of this study.

According to the last finding obtained in the study, it was found that essentialist philosophy of education belief was the most important sub-dimension which predicted traditional teaching-learning conception of teachers. It was seen that philosophy of education beliefs of teachers explained traditional teaching-learning conception by 11% in the total variance. Besides, progressivist, existentialist, and reconstructive philosophy of education beliefs were not significant in the prediction of traditional teaching-learning conception. This finding puts forward that teachers' traditional teaching-learning conception was explained strongly by such traditional philosophy of education beliefs as perennialist and essentialist. The views which were put forward by some authors in the related literature (Cevizci, 2011, 2012; Demirel, 2012; Ornstein & Hunkins, 2013; Sönmez, 2009) also support the findings of this study. Especially, it is seen very significant that the most important variable in predicting teachers' traditional teaching-learning conception was essentialist philosophy of education belief. Essentialist philosophy of education belief shows great similarity to traditional teaching-learning conception. There is hard study, forcing of students, book-based instruction, punishment, etc. in the basics of essentialist philosophy of education belief (Sönmez, 2009). Essentialist and perennialist philosophy of education beliefs, which are considered as traditional ones, are evaluated as a reflection of traditional education today. Traditional instruction finds its roots or basics in traditional philosophy of education beliefs. The teacher is in the centre and traditional teaching and learning methods are used in classrooms based on traditional understanding (Cheng et al., 2009). Therefore, students cannot participate in the learning process actively; in contrast they only watch this

process in a passive manner (Chan & Elliott, 2004). Student participation in the learning process is very limited and they are not allowed to direct teaching-learning process in classrooms based on traditional understanding. This task is only done by the teachers him/herself (Brooks & Brooks, 1999; Gagnon & Collay, 2001). Teachers adopting traditional teaching-learning conception manage the classroom solely, do not share the power and authority with anyone, and shape teaching-learning process only him/herself (Baş, 2014). Of course, award and punishment are seen as inevitable phenomena in classrooms having such teachers (Cevizci, 2012; Sönmez, 2009). As a result, philosophy of education beliefs, which are considered as traditional ones, show parallelism with traditional teaching-learning conception in most aspects. In this regard, it can be commented that teachers adopting traditional philosophy of education beliefs are to have a traditional teaching-learning conception. In other words, it can be put forward that teachers adopting essentialist and perennialist philosophy of education beliefs run a traditional understanding in teaching-learning process. It can also be stated that some findings obtained from the literature (Baş & Beyhan, 2013; Jones & Blankenship, 1972; Yılmaz, 2009) coincide with the related finding of this study.

In this study, it was seen some findings that showed teachers' philosophy of education beliefs and their teaching-learning conceptions are correlated with each other. The findings obtained in the study revealed that teachers' philosophy of education beliefs and their teaching-learning conceptions were correlated significantly. In this study, it was concluded that there were significant correlations between progressivist, existentialist, and reconstructive philosophy of education beliefs and constructivist teaching-learning conception. Similarly, it was also concluded that there were significant correlations between essentialist and perennialist philosophy of education beliefs and traditional teaching-learning conception. When looked at the results obtained in the study holistically, it was understood that teachers' philosophy of education beliefs was effective in the development of their teaching-learning conceptions. According to this, it was understood that while teachers having contemporary philosophy of education beliefs adopted a constructivist approach in teaching-learning process, teachers having traditional philosophy of educational beliefs adopted a traditional approach in teaching-learning process. This result shows that teachers are influenced by their adopted philosophy of education beliefs when arranging teaching-learning process in the classroom. Thus, it can be said that philosophy of education beliefs adopted by teachers are in a key role in the development of their teaching-learning conceptions.

In this study, the correlations between teachers' philosophy of education beliefs and their teaching-learning conceptions were examined. A similar study can also be carried out by taking the mediator effect of student control ideology into account conducting the structural equation modelling. Because, in another study carried out before (Baş & Beyhan, 2013), it was concluded that there were significant correlations between teachers' student control ideologies and their teaching-learning conceptions. While this study was conducted by considering in-service teachers working in the Ministry of National Education (MoNE), a similar study can be carried out by taking prospective teachers into account. Lastly, while the data of this study were collected quantitatively, another similar study can be conducted qualitatively which can be used to interpret the quantitative data.

Future Education, Education Philosophy and Teaching-Learning Conceptions

As the world and life get more complicated, this complexity affects any field of the life as well as the education and schools closely (Fullan, 2001). It means that this complexity affects not only the schools but also the teaching and learning conceptions of teachers (Chan & Elliott, 2004). In this context, the teaching and learning process in the classroom, with parallel to the change in the school, has experienced a serious breakage recently. In other words, as teaching and learning conception has experienced an important paradigm shift today (Brown, 2006), Turkey has been exposed to this paradigm shift in teaching and learning during the change of elementary curriculum in 2005 (Küçüktepe, 2010). This curriculum has been changed by handling it from a constructivist perspective. Consequently, constructivist teaching-learning conception has formed the nature of the curriculum (Turan, 2006). At this point, teachers have been expected to implement constructivist learning

practices in the classroom. In this respect, teachers were taken into in-service trainings in the context of constructivist approach during the change of the curriculum. Although teachers were taken into in-service trainings in the context of constructivist approach, their training styles were not in the context of contemporary philosophy of education beliefs (i.e., progressivist, reconstructive, existentialist philosophies), which the constructivist approach is fed by; teachers were mostly educated in the light of perennialist and essentialist philosophy of education beliefs (Sönmez, 2011). Though the curriculum in Turkey has been prepared with a constructivist perspective (Küçüktepe, 2010; Turan, 2006), it would not be wrong to say that the practices of perennialist and essentialist philosophy of education beliefs still continue to keep the dominant existence on the Turkish Education System (TES). The constructivist teaching-learning conception has a very important place in the perspectives that are put forward for future education (Brown, 2006; Hayes, 2007; Strommen & Lincoln, 1992). Constructivism is pointed out that it will be an effective approach on future education systems in terms of the perspectives put forward on teaching and learning (Newman, Griffin, & Cole, 1989). However, it is thought that a constructivist teaching and learning is possible with constructivist teachers. Although it is thought constructivist teachers may be trained through a suitable education process, it is considered that this is more associated with the adopted philosophy of education belief. Therefore, it may be stated that a teacher having perennialist and essentialist philosophy of education beliefs cannot adopt constructivist teaching-learning conception. The reverse is, of course, also possible. In this regard, in order to implement constructivism into classroom teaching and learning process, teachers adopting contemporary philosophy of education beliefs are needed. The future education needs individuals those who are discussing things, thinking critical, creative and reflective, productive, learning how to learn, and using information and communication technologies effectively, etc. (Polat & Çalışkan, 2013). It is thought that these kinds of individuals can be educated in constructivist classrooms. Consequently, this study, which has found that contemporary philosophy of education beliefs are related with constructivist teaching-learning conception, however, traditional philosophy of education beliefs are related with traditional teaching-learning conception, has indicated which philosophy of education beliefs are effective in the training of constructivist teachers for future education systems.

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