

A Study On The Relationship Between Teachers' Educational Beliefs And Their Level Of Openness To Occupational Change

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ABSTRACT: It is important to determine the educational beliefs and attitudes of teachers, being one of the most important determinants of change in educational organizations, towards change. The main purpose of this study is to test the model created for the relationship between the level of openness to occupational change of pre-school, primary and secondary school teachers and their educational beliefs. So as to identify the relationship between educational beliefs and the level of openness to change more clearly, a model according with the structural equation modeling assumptions has been set in the study. The working group of the study is comprised of 268 teachers of different branches working in Kars in the 2012-2013 academic years. "Openness to Personal Change Scale", "Openness to Occupational Change Scale" and "Educational Beliefs Scale" were used as data collection tools. Confirmatory factor analysis (CFA) was used for the validity and reliability of the scales used in the study while structural equation modeling analysis (SEM) was used for the analysis of data. Following the study, it has been determined that teachers being more open to personal and occupational change have educational beliefs of progressivism and re-construction is mwhile teachers being in tendency to preserve and sustain their personal habits have educational beliefs of perennial is mand essentialism.

Keywords: Educational beliefs, openness to change, educational philosophy, structural equation modeling, teacher. About five key words in alphabetical order, separated by comma

I. INTRODUCTION

Beliefs are one of the most important elements of culture in understanding social life and in determining the value of the individual. According to anthropologists, social psychologists and philosophers, beliefs are psychological understandings and propositions they feel right about the world (Richardson, 1996, cited in Savasci-Acikalın, 2009). In the literature, the concept of belief is defined in different ways. Calderhead (1996) stated beliefs as "assumptions, dedications and ideologies" in general. Erdogan (2002) identified the concept of faith as a perpetual organization of perception and knowledge related to an aspect of the individual's world. According to Pajares (1992), there is confusion between knowledge and belief. While knowledge is a provable, real-like and sharable concept, belief is a personal, and arguable concept that may vary between individuals (Mohamed, 2006). Beliefs are thought to have a powerful influence in the lives and judgements of individuals (Bandura, 1997).

When the literature is examined, it is seen that the concept of teacher beliefs is used and defined in different ways. Pajares (1992) has defined teacher beliefs as "complex structures" and stated that the difficulties in studies related to teacher beliefs stem from problematic definitions, poor conceptualizations and misunderstanding of beliefs (p. 307). Calderhead (1996) defines teacher beliefs as a concept embracing the knowledge and idea of teacher as a broader concept than teacher cognitive structure.

The concept of teacher belief is used together with the concept of educational belief. These educational beliefs involve the teachers' specific interest competencies such as teacher competence, motivation and self-confidence concepts. Motivation, effectiveness and self-esteem of teachers are important in terms of teacher beliefs (Rokeach, 1968). Also, in the related literature, it is seen that the educational beliefs are formed based on the educational philosophy (Livingston, McClain and DeSpain, 1995; Pajares, 1992; Rideout, 2006; Silvernail, 1992a, 1992b cited in Yilmaz, Altinkurt and Cokluk, 2011). Teachers' being close or distant to different educational philosophies affects how the students are trained functionally (Livingston et al., 1995 cited in Yilmaz, Altinkurt and Cokluk, 2011).

The issue of educational beliefs is important for the development of teachers' occupational practices and in respect to determine the effects of beliefs to behaviors (Ajzen and Madden, 1986 cited in Pajares, 1992). Teacher beliefs are deemed significant as they are thought to have influence on teachers' manners of decision-making, specific behaviors and teaching methods (Kagan, 1992; Kane, Sandretto, and Heath, 2002; Pajares, 1992).

Another important issue in the field of educational sciences such as teacher beliefs is teachers' levels of openness to change. Holt, Armenakis, Field and Harris (2007, 235) defined being open to change as individuals' accepting and adopting change cognitively and emotionally and their adapting it to a specific plan in accordance with the purposes. According to Ozdemir (1999) being open to change signifies that a person or an organization is susceptible, suitable and eager for change. Organizationally, openness to change is expressed as being eager to support change and providing a positive contribution to potential results of change (Wanberg and Banas, 2000). In this sense, it is not enough to support a change solely in the behavioral level, it is also necessary to develop positive attitudes in favor of change. It is also necessary to contribute to the results of the change in addition to bearing positive feelings about change (Herold, Fedor, Caldwell and Liu, 2008).

The teachers' cognitive, affective and behavioral attitudes on change influence the realization of change positively or negatively. A teacher's being open both to personal change and occupational change provides the change to expand to the entire school and school culture starting from the classroom environment (Tasdan, 2013).

Beliefs, attitudes and openness to change are important psychological factors that influence individual behavior and knowledge. Personal beliefs and attitudes are important in understanding the behavior of individuals. Therefore, in explaining the openness or reluctance to change, attitudes and beliefs are needed to be determined (Pajares, 1992 cited in Fishbein and Ajzen, 1975).

There are many factors that hinder or support the change of teachers. The most important of these factors is teachers' levels of openness to change and their attitudes towards learning. Sometimes teachers believe that their knowledge is sufficient and are not interested in adaptation to change. The school culture's supporting openness to change affects the level of openness to change. However, the individuals' levels of openness to change personally should also be described (Mohamed, 2006).

If educational change is to be successful, teacher beliefs and missions should be considered. Getting to know the beliefs of teachers will increase their motivation as they see themselves as a valued member of the learning - community (Goodson, 2003). Educational change can be successful by enclosing all teachers. So as to perform change, there must be a balance between the support given to teachers and the pressure applied to them. The relationship between the change in behaviors and beliefs should be increased. Everyone participating in the process of change should possess this and contribute to the value that will ensure success (Fuller 2001).

A correct management of the change process depends on understanding the change thoroughly. For the change process in education to be successful, or in other words, for the change to come true successfully, the change within the school should be adopted primarily by teachers, students, parents and all other groups (Erdoğan, 2002, 85-90). Research shows that teachers play a greater part in the change in schools (Ozdemir, 1999; Balci, 2001). The quality of education offered by teachers and their perspectives on education are influenced by the educational philosophy and educational beliefs they have. The values and beliefs of teachers can also affect their perceptions related to change and their levels of openness to change. That is why the results that will be obtained through determining the educational beliefs of teachers and through associating these beliefs to the levels of openness to change are expected to contribute to the management of change in educational institutions.

When the literature is examined, it is seen that the educational beliefs of teachers or teacher candidates are discussed by different authors (Ekiz 2005 Ekiz, 2007; Duman, 2008, Duman and Ulubey 2008, Northcote, 2009; Altinkurt, Yilmaz and Oguz, 2012; Ilgaz, Bulbul and Cuhadar 2013). Educational beliefs are one of the most studied subjects in UK (Blay ve Ireson, 2009; Florian ve Rouse, 2009), Spain (Cano, 2005), Greece (Mattheoudakis, 2007), Portugal (Fonseca, Costa, Lencastre, ve Tavares, 2012), Israel (Shechtman ve Or, 1996; Zohar, Degani ve Vaaknin, 2001), Netherlands (Meirink, Meijer, Verloop ve Bergen, 2009; Tillema, 1994; Zantinga, Verloop ve Vermunt, 2001), Turkey (Isikoglu, Basturk ve Karaca, 2009; Özgün-Koca ve Şen, 2006), China (Correa, Perry, Sims, Miller ve Fang, 2008), South Korea (Lee, Baik ve Charlesworth, 2006), Japan (Underwood, 2012), Singapore (Lim, 2010), Australia (Mansfield ve Volet, 2010), USA (Brousseau ve Freeman, 1988; Sanger ve Osguthorpe, 2011; Stipek, Givvin, Salmon ve Mac Gyvers, 2001), Canada (Jordan, Glenn ve Mc Ghie-Richmond, 2010) and other countries (cited in Kim, Spector, DeMeester <http://www.sciencedirect.com/science/article/pii/S0742051X1200131X> and Karen, 2013). It is seen that teachers' levels of openness to change are discussed in various aspects in different studies (Ocakli, 2006; Gokce 2005; Arafat, 2003; Toremén, 2002; Demirtas, 2012; Tasdan 2013). As stated above, the level of openness to change and educational beliefs are subjects that should be studied in detail in educational sciences in terms of their context and results. In the new world, where change and transformation are very fast, educational organizations get their shares eminently from this evolution. It is important to determine the attitudes and beliefs of teachers who are one of the most important determinants of change in educational organizations. However, it was found that there is not any study discussing the relationship between teachers' educational beliefs and their levels of openness to change in the literature. This research is important in terms of its fulfilling this deficiency and guiding practitioners in this sense through identifying the change perceptions of

teachers according to their educational beliefs. The main purpose of this study is to test the model created for relationship between the level of openness to occupational change of pre-school, primary and secondary school teachers and their educational beliefs.

II. METHOD

This research is designed with a relational screening model aiming at determining the current status (Karas, 2005). Relational screening model is a research model which aims to determine the indicator of covariance or degree of variance between two or more variants (Cohen, Manion and Morrison, 2000). A model in accordance with the structural equation modeling assumptions was formed so as to identify the relationship between educational beliefs and the levels of openness to change more clearly forming the relational screening model in the research (Brown, 2006).

III. THE WORKING GROUP OF THE RESEARCH

The working group of the study is comprised of 268 teachers of different branches working in Kars in the 2012-2013 academic year.

Table 1: The branch and gender distribution of teachers participated in the working group of the research

Variable			Teaching Area						Total
			Pre-school	PrimarySch.	Science	Turkish	Maths	SocialSci.	
Gender	Male	Frequency (f)	10	30	20	25	18	15	118
		Percentage (%)	8,48	25,43	16,95	21,18	15,25	12,71	44,02
	Female	Frequency (f)	30	40	20	25	15	20	150
		Percentage (%)	20,00	26,66	13,33	16,66	10,00	13,33	55,98
Total		Frequency (f)	40	70	40	50	33	35	268
		Percentage (%)	14,92	26,11	14,92	18,65	12,31	13,05	100

When Table 1 is examined, it can be seen that 118 (44.02%) of the teachers surveyed were male and 150 (55.98%) were women. When the distribution of teachers according to their teaching area are examined, it is seen that the working group is comprised of 40 (14.92%) teachers from the teaching field of pre-school, 70 (26.11%) teachers from primary school teaching, 40 (14.92%) teachers from the teaching field of science, 50 (18.65%) teachers from the teaching field of Turkish language, 33 (12.31%) teachers from the teaching field of mathematics, and 35 (13.05%) teachers from the teaching field of social studies.

IV. DATA COLLECTION TOOLS

"Openness to Personal Change Scale", "Openness to Occupational Change Scale" and "Educational Beliefs Scale" were used as data collection tools. Information about the validity and reliability of tools used for data collection are given below.

In order to determine the openness to personal change levels of teachers participated in the study, "Openness to Personal Change Scale" which is a two-factor model developed by Tasdan (2013) was applied. There are 23 items in the final state of the scale developed. Values showing whether the sample group of the measuring tool is applicable or not for the reliability and validity study were determined to be normal (KMO = .79 Bartlett's test of sphericity = χ^2 1321, 348 P= <.000). The total variance explained by the scale is 31.65%. The scale factors were called the Tendency to Preserve and Sustain Habits, Demand/Dynamism to Change. There are 9 items in the sub-dimension of "Tendency to Preserve and Sustain Habits" being the first factor of the scale. The rotated factor loading values related to items range from .34 to .77. This factor alone explains 16.41% of variance and Cronbach Alpha internal consistency coefficient is .81. There are 14 items in the sub-dimension of "Demand/Dynamism for Change" being the second factor of the scale. The rotated factor loading values related to items range from .36 to .61. This factor alone explains 16.99% of variance and the Cronbach Alpha internal consistency coefficient is .75. The Cronbach's alpha coefficient in this study was found to be "0, 85".

When the confirmatory factor analysis results regarding the openness to personal change scale are examined, the structure value for openness to personal change scale was found to be $\chi^2= 575,16$; $df= 229$, $p= 0,00$ ($p<0,01$), RMSEA= 0,085. When this resulting model was assessed according to some other indices, the following results were obtained:

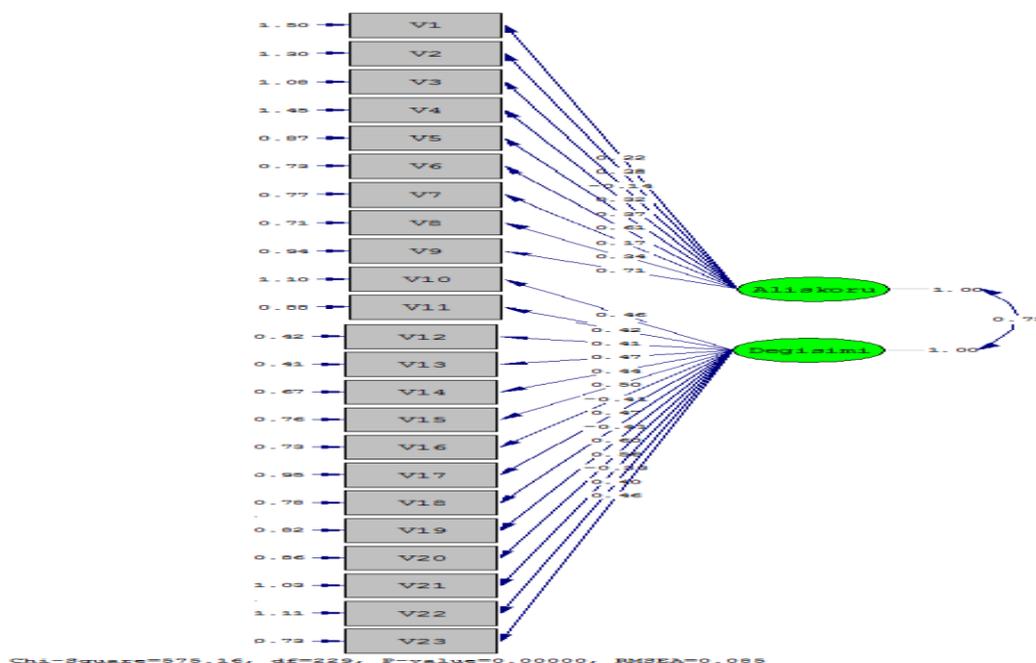
Table 2: Evaluation of Openness to Personal Change Scale in terms of Conformity Indices

Conformity Measurements	Good Conformity	Acceptable Conformity	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,08	Acceptable Conformity
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,98	Good Conformity
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,95	Good Conformity
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,90	Good Conformity
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,94	Acceptable Conformity
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NNFI \leq 0,97$	0,95	Acceptable Conformity

Source: Schermelleh-Engel and Moosbrugger, 2003:36

When Table 2 is examined, it is seen that the factor structure related to the confirmatory factor analysis results in respect of openness to personal change variance are at an "acceptable level" in terms of RMSEA, NFI and NNFI indices whereas it is at "good conformity level" in terms of CFI, GFI and AGFI indices. In this context, the results of confirmatory factor analysis have revealed that the scale of openness to personal change is structurally valid.

Figure 1: Path Diagram Regarding Openness to Personal Change Scale



Another scale used to determine the level of teachers' openness to vocational change is "openness to occupational change scale" developed by Tasdan (2013). Values showing whether the sample group of the measuring tool is applicable or not for the reliability and validity study were determined to be normal (KMO value = .83 Bartlett's test of sphericity = χ^2 1422, 824, P=.000). There are 14 items under the sole factor in "Openness to occupational change scale". Load factor values related to items range from .40 to .69. This factor explains 35,86% of variance and Cronbach Alpha internal consistency coefficient is .86.

When the confirmatory factor analysis results regarding the openness to occupational change scale are examined, the structure values for openness to occupational change scale were found to be $\chi^2 = 414,22$ (sd=140, $p < .01$), (χ^2 / sd) = 2.95; RMSEA= 0,044 When this resulting model was assessed according to some other indices, the following results were obtained:

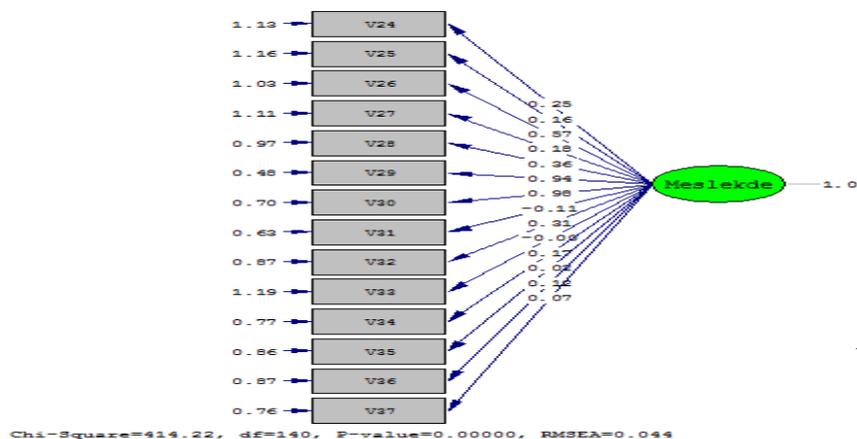
Table 3: Evaluation of Openness to occupational Change Scale in terms of Conformity Indices

Conformity Measurements	Good Conformity	Acceptable Conformity	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,04	Good Conformity
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,98	Good Conformity
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,96	Good Conformity
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,97	Good Conformity
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,92	Acceptable Conformity
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NFI \leq 0,97$	0,95	Acceptable Conformity

Source: Schermelleh-Engel and Moosbrugger, 2003:36

When Table 3 is examined, it is seen that the factor structure related to the confirmatory factor analysis results in respect of openness to occupational change variance is at "good conformity level" in terms of RMSEA, CFI, GFI and AGFI indices whereas it is at "acceptable conformity level" in terms of NFI and NNFI indices. In the light of the indices obtained, it has been revealed that the scale of openness to occupational change is structurally valid.

Figure 2: Path Diagram Regarding Openness to occupational Change Scale



The "EducationalBeliefScale" used in the study was developed by Yilmaz, Altinkurt and Cokluk (2011). KMO value of the scale was determined to be .93. The Bartlett sphericity test value was [$\chi^2 = 7521.998$; $p < 0.01$]. When the five factors that make "Educational Beliefs Scale" are taken together, the total variance explained by the scale is 49.57%. The Cronbach's alpha internal consistency coefficient for the "Progressivism" aspect of "Educational Beliefs Scale" is 0.91. This coefficient is 0.89 for "Existential Education" being the second aspect, 0.81 for "Reconstructivizm" being the third aspect, 0.70 for "Perennialism" being the fourth aspect and 0.70 for "Essentialism" being the fifth aspect, respectively. Cronbach's alpha internal consistency coefficient regarding the whole "Educational Beliefs Scale" is 0.90. When the confirmatory factor analysis results regarding the educational beliefs scale are examined, the structure values for educational beliefs scale were found to be $\chi^2 = 2059,22$ ($sd=730$, $p < 0,01$), $(\chi^2 / sd) = 2.82$; $RMSEA = 0,067$. When analyzed according to some other indices of the scale, the following results were obtained:

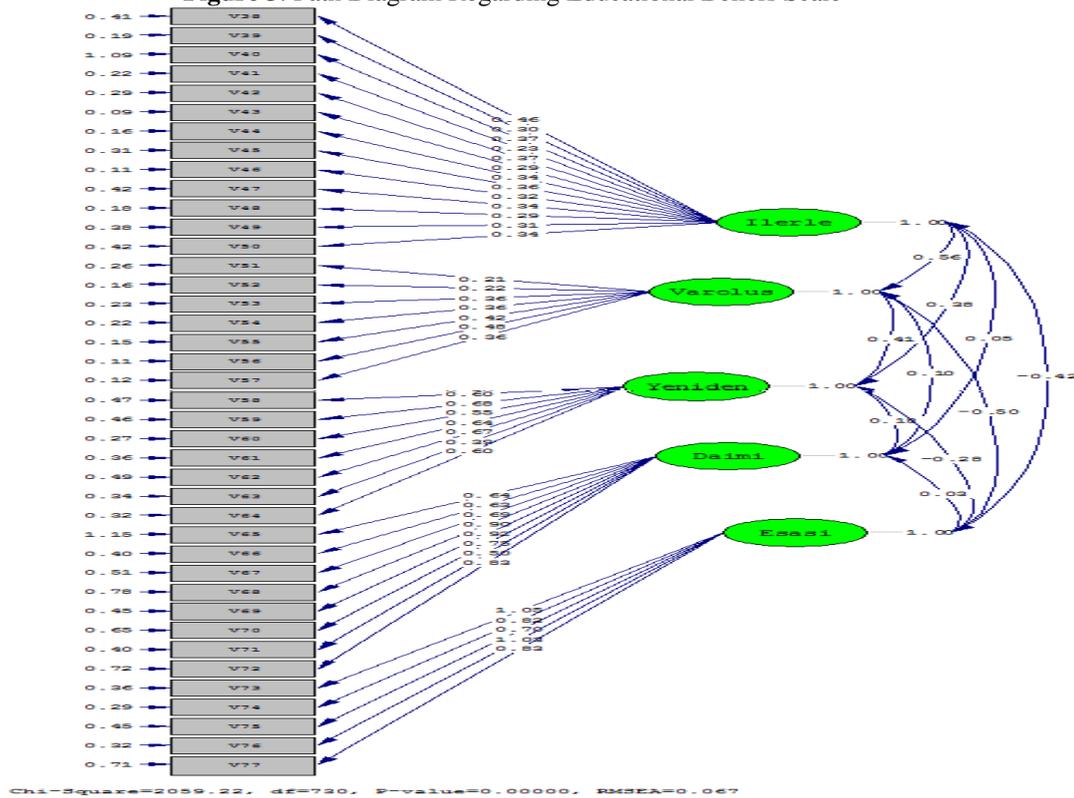
Table 4: Evaluation of Educational Beliefs Scale in terms of Conformity Indices

ConformityMeasurements	Good Conformity	Acceptable Conformity	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,06	Acceptable Conformity
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,99	Good Conformity
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,96	Good Conformity
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,85	Good Conformity
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,92	Acceptable Conformity
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NFI \leq 0,97$	0,95	Acceptable Conformity

Source:Schermelleh-Engel and Moosbrugger, 2003:36

When Table 4 is examined, it is seen that the factor structure related to the confirmatory factor analysis results in respect of educational beliefs variance is at "good conformity level" in terms of CFI, GFI and AGFI indices whereas it is at "acceptable conformity level" in terms of RMSEA, NFI and NNFI indices. When the conformity indices obtained were examined, it was revealed that the scale of educational beliefs is structurally valid.

Figure 3: Path Diagram Regarding Educational Beliefs Scale



V. DATA ANALYSIS

The results related to the demographic characteristics of teachers who participated in the working group were explained with frequency-percentage analysis on the basis of the data collected in the research. In addition to confirmatory factor analysis and validity analysis of the research model developed afterwards, the assumptions of measurement model were also tested. Internal consistency coefficient (Cronbach's alpha) values were included in the reliability of the data collection instruments used in this study. In the last stage of data analysis, regression equations explaining the analysis of structural research model and the test results of structural relations and study's problem status were determined.

VI. FINDINGS

Before starting the analysis of the research model, whether the measurement model met the assumptions of modelling was controlled through confirmatory factor analysis for each scale and it was decided that it met the assumptions of the research model. While "openness to personal change," "openness to occupational change" and "educational beliefs" comprised implicit variables, two subscales of personal change scale and five subscales of educational beliefs scale were defined as observed variables. Ultimately, the measurement model consisted of ten variables three of which were implicit and seven of which were observed.

The results of conformity indices related to educational beliefs and level of openness to change were determined to be [$\chi^2 = 7017.63$ ($df = 2827$, $p < .01$), $(\chi^2 / sd) = 2:48$; $RMSEA = 0.055$]. According to these results, the model was accepted to adjust perfectly in small samples with the actual data (Kline, 2005). When the model was evaluated according to some other indices of educational beliefs and openness to change model, the following results were obtained:

Table 5: Evaluation of the Relationship between Educational Beliefs and Level of Openness to Change in terms of Conformity Indices

Conformity Measurements	Good Conformity	Acceptable Conformity	Model	Result
RMSEA	$0 < RMSEA < 0,05$	$0,05 \leq RMSEA \leq 0,10$	0,05	Acceptable Conformity
CFI	$0,97 \leq CFI \leq 1$	$0,95 \leq CFI \leq 0,97$	0,96	Acceptable Conformity
GFI	$0,95 \leq GFI \leq 1$	$0,90 \leq GFI \leq 0,95$	0,92	Acceptable Conformity
AGFI	$0,90 \leq AGFI \leq 1$	$0,85 \leq AGFI \leq 0,90$	0,86	Acceptable Conformity
NFI	$0,95 \leq NFI \leq 1$	$0,90 \leq NFI \leq 0,95$	0,92	Acceptable Conformity
NNFI	$0,97 \leq NNFI \leq 1$	$0,95 \leq NNFI \leq 0,97$	0,95	Acceptable Conformity

Source: Schermelleh-Engel and Moosbrugger, 2003:36

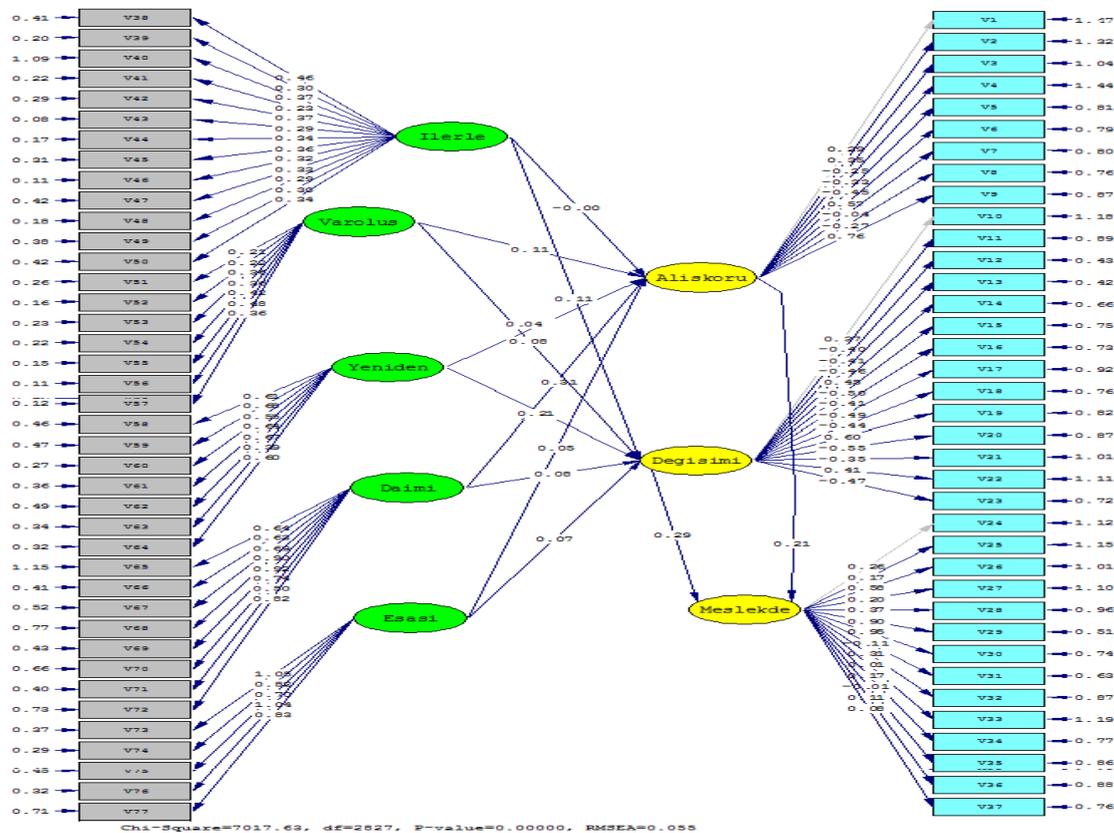
When the index in Table 5 is examined, it is seen that AGFI value's being 0,86 and GFI value's being 0.92 is an acceptable conformity value according to Schermelleh-Engel, Moosbrugger, Müller (2003). According to Tabachnick and Fidell (2001), as AGF and GFI values are sensitive to the size of the sample; they will give more convenient values in larger samples. In this context, AGF value's taking an acceptable value was deemed appropriate considering the sample of the study. While RMSEA value's being 0.05 is an acceptable conformity according to Schermelleh-Engel, Moosbrugger and Müller (2003), its being smaller than .06 is accepted as good conformity according to Hu, Bentler (1999) and Thompson (2004).

While CFI value's being 0,96 is an acceptable conformity according to Schermelleh-Engel, Moosbrugger, Müller (2003), it is accepted as a good conformity according to Hu and Bentler, 1999; Tabachnick and Fidell 2001.

According to table 5, it was identified that the model structure related to the variable of the relationship between educational beliefs and levels of openness to change was at an "acceptable conformity level" with regard to CFI and AGFI, RMSEA, GFI, NFI and NNFI indices. When the conformity indices were examined, it was reached the conclusion that the model explaining the relationship between educational beliefs and openness to change is structurally valid.

Path diagram of the model concerning the educational beliefs and openness to change levels is presented in Figure 4.

Figure 4: Path diagram regarding the educational beliefs and levels of openness to change



When the Structural Equation Modeling concerning the educational beliefs and levels of openness to change are examined in figure 4, variables were named as progressivism (Progress-Ilerle), existentialism (Existential-Varolus), re-constructionism (Re-Yeniden), perennialism (Perennial-Daimi), essentialism (Essential-Esasi), tendency to preserve and sustain habits (Preservesustain-Aliskoru), desire/dynamism to change (Change-Degisimi), openness to occupational change (Occupational-Meslekde).

The interpretation of the regression equations which are important in determining the explained variance of the model is presented below.

Table 6: Regression equation of the tendency to preserve and sustain habits variable
 Preservesustain = - 0.00054* Progress - 0.11* Existential + 0.11* Re + 0.31* Perennial + 0.078* Essential, R² = 0.12

When the regression equation concerning the tendency to preserve and sustain habits being an aspect of openness to personal change is examined in table 6, it is seen that R^2 is equal to 0.12. According to this conclusion, educational beliefs of teachers explain an approximately 12% of change in the tendency to preserve and sustain habits. Perennialism seems to be the most important variable ($p < .05$) explaining the tendency to preserve and sustain habits. The correlation coefficient is $\gamma = 0.31$.

Table 7: Regression equation of desire/dynamism to change variable

Change = $0.011 * \text{Progress} - 0.067 * \text{Existential} + 0.021 * \text{Re} - 0.06 * \text{Perennial} + 0.068 * \text{Essential}$, $R^2 = 0.077$

When the regression equation concerning the desire/dynamism to change being an aspect of openness to personal change is examined in table 7, it is seen that R^2 is equal to 0.077. The subscales of the educational beliefs scale used to determine the desire to change and dynamism tendency seems to explain the 7.7 % of the variance. Reconstructivism seems to be the most important variable ($p < .05$) explaining the desire and dynamism to change variable. The correlation coefficient is $\gamma = 0.21$.

Table 8: Regression equation of openness to occupational change variable

Occupational Change = $0.21 * \text{Preservesustain} + 0.29 * \text{Change}$, $R^2 = 0.13$

When the regression equation concerning the openness to occupational change variable is examined in table 8, it is seen that the coefficient of determination is $R^2 = 0.13$. The subscales of the openness to change scale used to determine the openness to occupational change tendency seems to explain 13 % of the variance. Perennialism seems to be the most important variable ($p < .05$) explaining the tendency to preserve and sustain habits variable. The correlation coefficient is $\gamma = 0.29$. When the variables related to "openness to occupational change" are examined, it is seen that "Desire/Dynamism to change" variable is the most influential variable. The correlation coefficient is $\gamma = 0.29$. Change dynamism variable constitutes the highest correlation coefficient with the re-constructionism variable. The correlation coefficient is $\gamma = 0.21$. Re-constructionism variable correlates to V59 observed variable and the correlation coefficient is $\gamma = 0.68$. In the educational beliefs scale, V59 "the school's core values must be reinterpreted" statement takes part. The correlation coefficient between the desire and dynamism to change forms the second highest coefficient with Progressivism after re-constructionism. The correlation coefficient is $\gamma = 0.11$. The desire and dynamism to change variable correlates lowest to existentialism with a correlation coefficient of $\gamma = 0.06$, to essentialism with a correlation coefficient of $\gamma = 0.07$, to perennialism with a correlation coefficient of $\gamma = 0.08$ respectively.

It is seen in the model that another variable related to "openness to occupational change" is the tendency "to preserve and sustain habits". The correlation coefficient is $\gamma = 0.21$. The tendency to preserve and sustain habits variable constitutes the highest correlation coefficient with perennialism variable. The correlation coefficient is $\gamma = 0.31$. Perennialism variable correlates to V69 observed variable and the correlation coefficient is $\gamma = 0.92$. In the educational beliefs scale, V69 "the distinctive feature of the human is mind" statement takes part. After perennialism, existentialism forms the second highest coefficient for the variable of tendency to preserve and sustain habits. The correlation coefficient is $\gamma = 0.11$. The tendency to preserve and sustain habits variable correlates lowest to progressivism with a correlation coefficient of $\gamma = 0.00$, and to re-constructionism with a correlation coefficient of $\gamma = 0.04$, respectively.

VII. CONCLUSION, DISCUSSION AND RECOMMENDATIONS

As a result of the research, it is shown that in the aspect of preserving and sustaining habits being an aspect of teachers' openness to personal change, the educational beliefs of teachers explain approximately 13 % of the change. In this aspect, it is seen that teachers having educational philosophy of perennialism tend more to preserve and sustain their habits. Nevertheless, another remarkable result in this aspect is that teachers with the educational philosophy of progressivism have the least power of prediction in terms of sustaining their habits. These results are consistent with the related literature. According to the educational philosophy of perennialism, individuals must be educated according to unchanging moral values, universal principles and traditions (Sonmez, 2005). Progressivism is the application of pragmatism to education and suggests that everything is subject to constant change (Yayla 2009). Again, teachers with the educational philosophy of progressivism argue that the school's core values might change and that they need to be innovative. Consistent with these results, it was determined in the model established in the aspect of desire and dynamism to change being an aspect of teachers' openness to personal change that teachers with the educational philosophy of progressivism have higher desire and dynamism for a change. In fact, teachers' being open to change or not is related to some extent whether the school is inclined to change or not. In a research conducted by Alkin-Sahin, Tunca and Ulubey (2014), it was found out that teacher candidates embrace modern educational philosophies at high levels where they embrace traditional educational philosophies at low levels in terms of educational beliefs. In schools

where a significant number of teachers have the educational philosophies of progressivism and re-constructionism, making change real would be easier. It can be considered that teachers being open to change take responsibility to develop children's advanced thinking skills through increasing the learning opportunities of students (Baylor and Ritchie, 2002 cited in Calik and Er, 2014). Research results show that there is a significant and high relationship between the perceptions of teachers related to the school's being open to change and school's capacity of change (Calik and Er 2014).

In the model, it was specified that there is a high correlation between the views of teachers adopting the philosophy of re-constructionism in their levels of openness to personal change and the expression that "the core values of the school should be reinterpreted" in the aspect of educational beliefs. According to re-constructionism based on pragmatism, education should rebuild the society to overcome the cultural crisis of the era (Sonmez, 2005; Platt, 2009). And the school should be the basic institution in reinterpreting the core values in the process of rebuilding the society. In a research conducted by Onen (2012), educational beliefs of candidate teachers and their attitudes towards computer and internet use were found to be significantly and positively correlated. In the study, there is a positive correlation between progressivist, re-constructionist and existentialist educational aspects and attitudes of candidate teachers towards computer and internet use. The fact that teachers having higher dynamism of change personally are the ones whose lowest predictors are educational philosophies of perennialism and essentialism is consistent with the literature.

It is seen in the educational beliefs scale of the model that "the distinctive feature of the human is mind" expression is an important predictor of tendency to preserve and sustain habits variable. This is again consistent with the literature. Perennialism interprets the truth, knowledge and people in accordance with the principle of "stability". The fact that there is a significant relationship between educational beliefs determined according to educational philosophies and the propensity to critical thinking says a lot about the development of philosophy education and critical thinking, and this education of critical thinking would indirectly contribute to individuals' preferring their educational philosophies more consciously (Alkın-Sahin, Tunca and Ulubey, 2014).

These two results identified above indicate that two different philosophical beliefs are dominant over the dynamism to change of teachers' openness to occupational change. It is seen that teachers with higher dynamism to change have a higher tendency in believing re-constructionism philosophy while teachers embracing to sustain their habits have a higher tendency in believing perennialist philosophy.

When the educational beliefs of teachers being open to change are compared among re-constructionism, progressivism, perennialism and existentialism; it has been found out that teachers being open to change have higher beliefs in re-constructionism and progressivism. In the study, it has been found out that teacher candidates embrace modern educational philosophies at high levels where they embrace traditional educational philosophies at low levels in terms of educational beliefs. Educational beliefs have been discussed in four aspects in the research conducted by Karadag, Baloglu and Kaya (2009) on school administrators; it has been determined that educational philosophies of progressivism and re-constructionism are the most adopted educational philosophies whereas essentialism and perennialism are the least adopted.

The following recommendations have been developed based on the results of the research: It has been found out in the research that teachers who are more open to change personally and occupationally have the educational beliefs of progressivism and re-constructionism. Based on this result, teachers need to be supported with practices that encourage progressivism and re-constructionism. In this study, teachers' level of openness to change and their educational belief have been studied with a group of preschool, primary and secondary school teachers in Kars through using a quantitative method. To determine the different aspects of the subject of openness to change, qualitative research should also be carried out for more details besides establishing different models.

REFERENCES

- [1]. Alkın-Sahin, S. Tunca , N.ve Ulubey, Ö.(2014). Öğretmen Adaylarının Eğitim İnançları ile Eleştirel Düşünme Eğilimleri Arasındaki İlişki İlköğretim Online, 13(4), 1473-1492, 2014. [Online]: <http://ilkogretim-online.org.tr>.
- [2]. Arafat, N. (2003). *Örgütsel yenileşmede öğretmen tutumlarının etkisi*. Yayınlanmamış yüksek lisans tezi. Kırıkkale Üniversitesi, Sosyal Bilimler Enstitüsü, Kırıkkale.
- [3]. Balcı, A. (2001). *Etkili okul ve okul gelişimi*. Ankara: Pegem Akademi Yayıncılık.
- [4]. Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191 -215.
- [5]. Calderhead, J. (1996). *Teachers: Beliefs and knowledge*. In D. Berliner, & R. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 709-725). New York: Macmillan Library Reference.
- [6]. Demirtaş, H. (2012). İlköğretim okullarının değişime açıklığı. *İlköğretim Online*, 11(1), 18-34.
- [7]. Duman, B. & Ulubey, Ö. (2008). Öğretmen Adaylarının Benimsedikleri Eğitim Felsefelerinin Öğretim Teknolojilerini ve İnterneti Kullanma Düzeylerine Etkisi ile İlgili Görüşleri. *Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 20, 95-114.
- [8]. Duman, B. (2008). Öğrencilerin Benimsedikleri Eğitim Felsefeleriyle Kullanıldıkları Öğrenme Strateji ve Öğrenme Stillерinin Karşılaştırılması. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 17 (1), 203 -224.
- [9]. Ekiz, D. (2005). Sınıf öğretmeni adaylarının eğitim felsefesi aktımlarına ilişkin eğilimlerinin karşılaştırılması. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 19, 1-11.
- [10]. Ekiz, D. (2007). Öğretmen adaylarının eğitim felsefesi aktımları hakkında görüşlerinin farklı programlar açısından incelenmesi. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 24, 1-12.

- [11]. Erdođan, İ. (2002). *Eđitimde deđişim yönetimi*. Ankara: Pegem Akademi Yayıncılık.
- [12]. Ergün, M. (2009). *Eđitim Felsefesi*. Ankara: Pegem Akademi.
- [13]. Fullan M 2001. The New Meaning of Educational Change. 3rd Edition. London: Routledge Falmer.
- [14]. Goodson, IF (2003). Professional Knowledge, Professional Lives: Studies in Education and Change. Philadelphia, PA: Open University Press
- [15]. Gökçe, F. (2005). Bir deđişim aracı olarak güç alanı analizi tekniđi ve eđitimsel deđişimin yönetimi. Kuram ve Uygulamada Eđitim Yönetimi Dergisi, 11 (43), 327-354.
- [16]. Herold, D. M., Fedor, D. B., Caldwell, S., & Liu, Y. (2008). The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. Journal of Applied Psychology, 93, 346-357.
- [17]. Holt, D.T. , Armenakis, A. A, Feild, H.S. & Haris, S.G. (2007). Readiness for organizational change the systematic development of scale. The Journal of Applied Behavioral Science, 43(2):232-255.
- [18]. Hu, L.T. and Bentler, P.M. (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," Structural Equation Modeling, 6 (1), 1-55.
- [19]. Ilgaz G., Bülbül T. & Çuhadar, C. (2013). Öđretmen Adaylarının Eđitim İnançları ile Öz-Yeterlik Algıları Arasındaki İlişkinin İncelenmesi. *Abant İzzet Baysal Üniversitesi Eđitim Fakültesi Dergisi*, 13 (1), 50-65
- [20]. Kagan, D. M. (1990). Ways of evaluating teacher cognition: Inferences concerning the Goldilocks principle. Review of Educational Research, 60, 419-469.
- [21]. Kane, R. Sandretto, S., & Heath, C. (2002). Telling half the story: A critical review of research on the teaching beliefs and practices of university academics. Review of Educational Research, 72(2), 177-228.
- [22]. Karadađ, E., Balođlu, N. Ve Kaya, S. (2009). "Okul Yöneticilerinin Eđitim Felsefesi Aktımlarını Benimseme Düzeylerine İlişkin Ampirik Bir Çalıřma", Kaygı-Uludađ Üniversitesi Felsefe Dergisi, S: 12, s. 181-200.
- [23]. Kim, C Kim, M. K.L., Spector C, Michael, Karene M. (2013) *Teacher beliefs and technology integration* Teaching and Teacher Educati D°on Volume 29, January 2013, Pages 76-85
- [24]. Mohamed N. (2006) *An Exploratory Study of the Interplay between Teachers' Beliefs, Instructional Practices & Professional Development*. A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Language Teaching and Learning, The University of Auckland, 2006.
- [25]. Nicholas, G. & Husser, M. S. (1999). The Future of organization: The Death of the firm. <http://webc-lass.cgu.edu.au>. (Eriřim Tarihi: 25.10.2008).
- [26]. Northcote, M. (2009). Educational Beliefs of Higher Education Teachers and Students: Implications for Teacher Education. *Australian Journal of Teacher Education*, 34 (3), 68-81
- [27]. Ocaklı, E. (2006). Okul müdürlerinin duygusal, bilişsel ve davranışsal boyutlarda deđişime açıklıkların ölçülmesi. Yayınlanmamış Yüksek Lisans Tezi. Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.
- [28]. Önen, A.S. (2012) Eđitime yönelik inançların bilgisayar teknolojilerini kullanmaya yönelik tutumlara etkisi. Hacettepe Üniversitesi Eđitim Fakültesi Dergisi 43: 353-361
- [29]. Özdemir, S. (1999). Eđitimde örgütsel yenileşme. Ankara: Pegem Akademi Yayıncılık
- [30]. Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. Review of AAH GRAPHICS, INC. / (540) 933-6210 / FAX 933-6523 / 11-04-2005 / 10:19 38 ETR&D, Vol. 53, No. 4 Educational Research, 62(3), 307-332.
- [31]. Rokeach, M. (1968) Beliefs, Attitudes, and Values: a theory of organization and change (San Francisco, CA, Jossey-Bass).
- [32]. ROKEACH, M. (1973) The Nature of Human Values (New York, Free Press).
- [33]. Savaşçı-Acıkalin, F. (2009). Teacher beliefs and Practice in Science Education. *Asia-Pacific Forum on Science Learning and Teaching*, 10 (1), 1-14
- [34]. Schermelleh-Engel, K., Moosbrugger, H., & Muller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research-Online*, 8, 23-74.
- [35]. Sönmez, V. (2005). *Eđitim Felsefesi*, Ankara: Anı Yayıncılık.
- [36]. Tabachnick, B. G., & Fidell, L. S. (2001). Using Multivariate Statistics. Boston: Allyn and Bacon.
- [37]. Taşdan, M. (2013). İlköđretim okulu öđretmenleri için kişisel ve mesleki deđişime açıklık ölçeklerinin geliştirilmesi; bir uygulama. Akademik Bakış Dergisi Sayı: 35 Mart – Nisan 2013 Uluslararası Hakemli Sosyal Bilimler E-Dergisi
- [38]. Thompson, B. (2004). Exploratory and confirmatory factor analysis. Washington: American Psychological Association.
- [39]. Töremen, F. (2002). Eđitim örgütlerinde deđişimin engel ve nedenleri. Fırat Üniversitesi Sosyal Bilimler Dergisi, 12 (1), 185-202.
- [40]. Wanberg, C.R., Banas, J.T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. Journal of Applied Psychology, 85(1): 132- 142.
- [41]. Yayla, A. (2009). Eđitimin Felsefi Temelleri. *Eđitim bilimine giriş* (Edt: H. B. Memduhođlu & K. Yılmaz). Ankara: Pegem Akademi Yayıncılık. ss. 19-43.
- [42]. Yılmaz, K., Altınkurt, Y. & Çokluk, Ö. (2011). Eđitim İnançları Ölçeđi'nin Geliştirilmesi: Geçerlik ve Güvenirlik Çalıřması. *Kuram ve Uygulamada Eđitim Bilimleri*, 11 (1), 335-350.