

## Development of Curriculum Changes Perception Scale and Teachers' Perceptions of Curriculum Changes

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### Abstract

This study aims to develop a scale to measure teachers' perceptions of curriculum changes. The experimental form created for this purpose was presented to the experts for their opinions. The content validity rates of the items were determined in line with the feedback from experts. Items with a content validity rate of less than .80 were excluded from the study. The 11-item trial form was applied to 162 Turkish teachers from different branches. Sampling was selected through convenient sampling method. With the Exploratory Factor Analyses (EFA), a two-dimensional structure consisting of 11 items, namely "Resistance to Program Changes" and "The Effect of Program Changes on Learning Environments", was reached. The relationship between the subscales of the scale was examined in the analyzes and it was found that the factors were in a significant relationship with each other. It has been verified as a result of the analysis that the sub-dimensions are components of a structure that includes positive and negative perceptions called teacher perceptions against curriculum changes and that they together form a superstructure. It was determined that the model's goodness of fit indexes were quite high. Confirmatory factor analysis also confirmed the EFA results. The internal consistency coefficient obtained for the whole scale was determined as .95.

**Keywords:** Program Changes, Teacher Perceptions, Scale Development

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## Introduction

Curricula change quite frequently in Turkey. With the proclamation of the Turkish Republic, curricula were gathered in one hand within the framework of Tevhid-i Tedrisat Law and became parallel with the practices in the west (Varış, 1970). In the 1950s, the definition of curriculum was changed from “Müfredat Programı” to “Eğitim Programı” which means the Turkish Ministry of Education accepted a broader definition by current studies as the second definition involves a broader meaning. Particularly, in the last 20 years, almost every minister has tried to implement a new program.

Even if teachers follow curricula while teaching a subject, they tend to use their ideas and make small or even bigger changes in their lessons. In other words, teachers refer to their past experiences upon which they formulate decisions to change the current situation into one which better suits to their own beliefs, values, and vision of what the teaching situation should be (Duffee & Eikenhead, 1992; OECD, 2009).

Curriculums change in time which is parallel with the educational philosophy of the dominant academicians and administrators. Teachers’ role in implementing curriculums have changed for the past decades. Traditionally the role of teachers was perceived as “executors” of the innovative ideas of the policymakers. Nowadays, there is a consensus in related literature approving the fact that teachers have a leading role in implementing curricula (Ball & Cohen 1999). In this respect, it can be said that curriculum changes gradually let teachers act more freely (Driel et al, 2008). Also, Change is a part of our life so the curriculums should be designed to meet this end and teachers should adapt these changes (Şahin, 2020).

Teachers are educated according to one educational philosophy and they tend to use this philosophy during their professional life. Their curriculum orientation is both related to the goals of education, to the relative importance of the subject matter, and to how teachers and students should interact (Tanrıverdi & Apak, 2016). This fact should be considered when changing curricula. Studies showed that Turkish teachers did not internalize these curriculum changes (Yaşar, 2012). The more teachers get older, the more conservative they become. Younger teachers are more open to curriculum changes. When curriculum changes are planned, this fact should be considered and varying curriculum orientations among pre-service and in-service schoolteachers should be considered (Ashour et al., 2012). Also, another important factor for teachers’ adopting changing curriculums is their job satisfaction (Lüleci & Çoruk, 2018).

Curriculum reform can only be successful when teachers’ ideas are considered and confronted. Otherwise, teachers will maintain their hidden agendas in the privacy of their classrooms and the process will result in a deceiving public exercise of reform and a waste of energy and

resources. Teachers are those who ultimately decide the fate of any educational enterprise (Handal & Herrington, 2003). Reforms that seek to by-pass teachers or to be overly prescriptive will not succeed. (Kirk & Mc Donald, 2001).

### **Purpose of the Study**

The purpose of this study was to find out teachers' perceptions of curriculum changes. The research questions are the following:

1. What are the explanatory and confirmatory factor analysis results of the Curriculum Changes Perception Scale (CCPC)?
2. What is the reliability test result of the Curriculum Changes Perception Scale (CCPC)?
3. What are teachers' perceptions of curriculum changes?
4. Do gender, age, education level, school type, or teaching branch explain teachers' perceptions of curriculum changes?

### **Method**

#### **Research Design**

The study was designed according to the descriptive research methodology. To answer the research questions, a scale for assessing teachers' perceptions on curriculum changes was developed, tried and its technicality (validity & reliability) was examined. Additionally, by using this reliable and valid scale teachers' perceptions of curriculum changes were compared as per various factors.

#### **Participants**

During the research project, three different participant groups were used:

##### ***Trial group for scale development***

This group consists of 122 teachers working in a central Anatolian city. 75 of those were female, while 47 of them male, 99 teachers have a bachelor's degree in teaching while 23 of them have a graduate degree. 10 preschool teachers, 15 primary school teachers, 1 school counselor, 39 Turkish literature and language teachers and 57 of them were Turkish language teachers. Researchers worked with this group in April 2015. Construct validity (explanatory factor analysis) and reliability (Cronbach Alpha) of the scale were inspected with this group.

##### ***Confirmatory Factor Analysis Group***

This group consisted of 162 teachers working in Eskişehir, Turkey. The confirmatory Factor Analysis study was conducted in May 2015.

**Table 1.** Distribution of demographic data of the participants

	Variable	f
Gender	Female	99
	Male	63
Graduation	Bachelor's	132
	Master's	30
Teaching Subject	Kindergarten	10
	Primary	19
	Maths	52
	Turkish	81

### Study Group

This group was subjected to the scale confirmed with validity, reliability, and confirmatory factor analysis (CFA) tests. The study group consisted of 238 teachers working in Eskişehir, Turkey. The sampling was determined through a probability sampling method as purposeful sampling enabled researchers to gather more pointed data from voluntary participants. The practice was made in July 2015.

**Table 2.** Distribution of demographic data of the participants

	Variable	f
Gender	Female	137
	Male	101
Graduation	Bachelor's	191
	Master's	47
Teaching Subject	Kindergarten	10
	Primary	16
	Psychological Counselling	30
	Turkish Literature	80
	Turkish	82
	Social Sciences	18
	Geography	1
	Visual Arts	1
Age	Below 25	4
	25-34	58
	35-44	113
	45-54	53
	Above 55	10
Faculty of Graduation	Engineering	1
	School of Economics and Administrative Sciences	1
	Faculty of Arts and Sciences	61
	Faculty of Education	141
	Institute of Education	8
	Faculty of Distance Education	4

### Scale Development Process

It is generally stated in the literature that the scale development process should follow some necessary guidelines. During our scale development process, we followed these scale development

steps (Cohen & Swerdlik, 2013; Crocker & Algina, 1986; DeVellis, 2014; Şeker & Gençdoğan, 2014).

Setting the objective of the scale, determining the target group and the reason for applying that objective,

- a. Deciding the scope and the content of the scale,
- b. Writing items in line with determined scope and content,
- c. Controlling the items and drafting the scale,
- d. Deciding on the grading and data analysis method of the items,
- e. Applying the draft scale to the scale development study group,
- f. Grading and analyzing the items,
- g. Forming the final form of the scale

#### **Data Collection Tool**

“Curriculum Changes Perception Scale (CCPS)” is a Likert type scale and consists of 23 questions with 5 rating points (totally disagree, disagree, partially agree, agree, totally agree), and its technical specialties (validity and reliability) were tested in this research process. Before the scale development process was started, researchers reviewed the related literature (curriculum development, curriculum evaluation, change, and reform in education). Then, the items were written, and the draft scale was given to the field experts for review. The results from the data analysis revealed that the items 1, 2 and 3 formed a dimension, however, this dimension is not a collectible one. It was concluded that these questions are not a sub-scale, so they were excluded. The items 4, 6, 7, 9, 12, 13, 17 and 19 have low total item correlation (below 0.30) and they also were excluded from the scale. As a result of the explanatory factor analysis, the final form of the scale consisted of 11 items in two dimensions. These dimensions were explained in detail below:

#### ***Resistance to Application of Curriculum Changes***

This factor consists of items 1, 2, 3, 7, and 11. This dimension provides information about teachers’ resistance to applying changes in curricula. Items are negative so they are coded reversely. The possible maximum score of this subscale is 25.

### ***The effect of Curriculum Changes on teaching/learning settings***

This dimension consists of 4, 5, 6, 8, 9, and 10 numbered items. It informs the researchers about the contribution of the curriculum changes to the teaching and learning settings. All of these items are positive. The highest score that can be obtained from this subscale is 30.

#### **Analysis of Data**

The data was analyzed using IBM-SPSS 19 and AMOS software. To test the scale's reliability and validity Kaiser-Meyer-Olkin (KMO), Bartlett Sphericity, Varimax Rotation, Anti-Image Correlation tests, Cronbach Alpha reliability coefficient were used (Büyüköztürk, 2013; Özdamar, 2013).

### **Results**

#### **Construct Validity (Explanatory Factor Analysis)**

The construct validity of CCPS was found with Principal Component Analysis. In Principal Component Analysis Keiser- Meyer-Olkin (KMO) and Bartlett Sphericity tests are conducted to see whether the data set is suitable for factor analysis. Varimax rotation method was used to exhibit factor structures better. The details of these analyses are below:

To identify the factor structure of CCPS, the gathered data of the trial group were tested to see whether its factor structure is suitable for factor analysis (Büyüköztürk, 2013; Özdamar, 2013).

1. KMO value was found 0.826. This value is over 0.50, which shows the data set is appropriate for factor analysis.
2. Bartlett Test results were found [ $\chi^2=802.162$ ;  $df=55$ ,  $p<0.01$ ] and the meaningfulness of this result showed factor analysis can be applied to this data.

1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup> items were gathered as a factor in consequence of explanatory factor analysis of CCPS, but the factor is not summable. This is understood as these questions are not a subscale. Therefore, these items were excluded. Items 4, 6, 7, 9, 12, 13, 17 and 19 were also removed as they showed low total item correlation (below 0.30). Remained items showed factor values between 0.357 and 0.819. Total item correlations were between 0.448 and 0.756. The two factors formed after varimax rotation explained %63.431 variances in the perceptions of teachers against curriculum changes. Item factor load values and total item correlations were shown in Table 3.

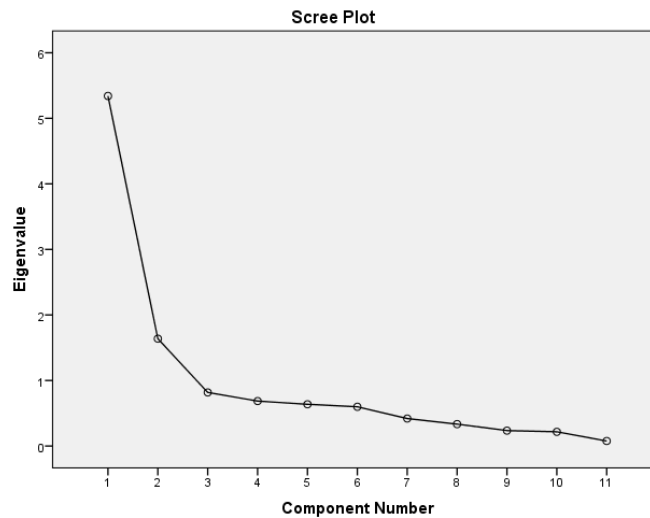
**Table 3.** Factor Analysis Primary Factor Load Values, Total Item Correlations, Anti-Image Correlations and Factors After Varimax Rotation

Item No	Primary Factor Load Values	Total Item Correlation	Anti-image Correlation	Factor 1	Factor 2
M14	0.780	0.747	0.815	0.857	
M15	0.803	0.755	0.744	0.872	
M16	0.819	0.703	0.814	0.900	
M20	0.648	0.709	0.942	0.744	
M21	0.697	0.756	0.828	0.758	
M22	0.557	0.613	0.900	0.718	
M8	0.357	0.448	0.898		0.540
M10	0.714	0.555	0.776		0.829
M11	0.709	0.464	0.758		0.840
M18	0.393	0.472	0.813		0.565
M23	0.500	0.499	0.893		0.670

Explained Variance = %63.431

Reliability Value of the Scale (Cronbach  $\alpha$ ) = 0.890

As seen in Table 3, the primary factor loads of the remaining items were above 0.357 and total item correlations were above 0.448. Explained variance is above %63. This percentage is above the acceptable value for scale development studies in social sciences (Büyüköztürk, 2013). The anti-image correlation values change between 0.744 and 0.942. None of the remained items were below 0.50. This value shows that factor values of items contribute highly to the factor load (Özdamar, 2013). Varimax Rotation Method was applied to see whether there were subscales and if there were which items were gathered under which factor (Büyüköztürk, 2013; Özdamar, 2013). The Varimax Rotation Method showed there are two factors in the scale. Figure 1 shows the scree plot of the scale and that confirms the two factors of the scale.



**Figure 1.** The Scree Plot Graphic of CCPS

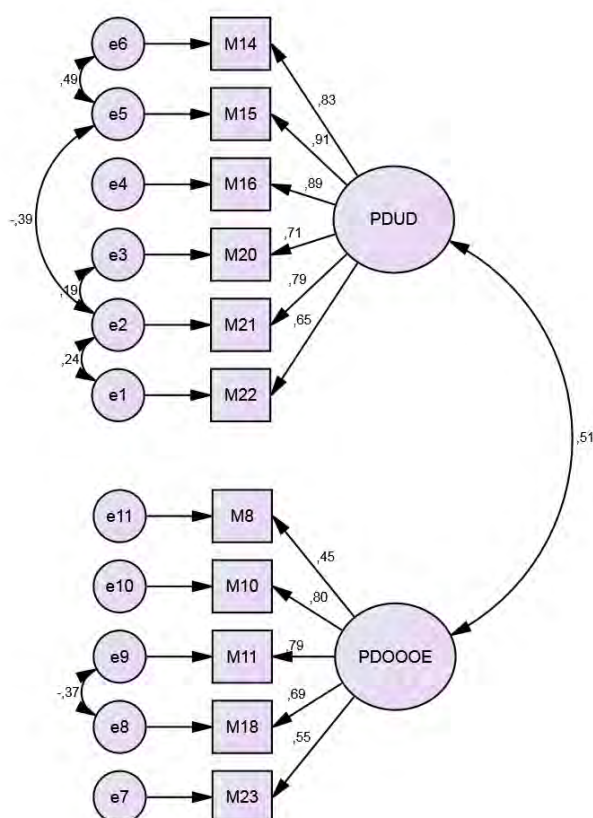
The scree plot graphic shows that after two factors, the line becomes horizontal. That shows that the scale has two dimensions.

In brief;

- Items 8, 10, 11, 18 and 23 constitute first sub-dimension. These items are questions about teachers' resistance to applying new curriculums. Items were renumbered as 1, 2, 3, 7 and 11, also the dimension was named as "Resistance to Applying Curriculum Changes"
- Items 14, 15, 16, 20, 21 and 22 constitutes the second sub-scale. These items are about the effects of curriculum changes on the teaching/learning environment. Items were renumbered as 4, 5, 6, 8, 9 and 10. This dimension was named "The Effects of Curriculum Changes to Teaching/Learning Environment"

### Confirmatory Factor Analysis

To see whether the structure of CCPS can be affirmed, confirmatory factor analysis was applied to the scale. The model after the analysis is shown in Figure 2.



**Figure 2.** The Explanatory Factor Analysis Model of CCPS; Abbreviations PDUD: Resistance to Applying Curriculum Changes, PDOOOE: The Effect of Curriculum Changes to Teaching/ Learning Environment.



When Figure 2 is analyzed, Chi-Square and Degree of Freedom levels as a result of Confirmatory Factor Analysis were  $X^2=104.948$ , ( $sd=38$ ,  $p<.01$ ) and  $X^2/sd=2.762$  ratio was found. This ratio has a value below 3 and refers to a perfect fit (Jöreskog & Sörbom, 1993; Kline, 2005; Sümer, 2000). One of the most common fit indices of Confirmatory Factor Analysis is RMSEA (root mean square error of approximation). RMSEA value should be 0.05 or below. However, many academics state this value is acceptable until 0.08 (Browne & Cudeck, 1993; Hu & Bentler, 1999; Şimşek, 2007; Vieira, 2011). The RMSEA value found in this analysis is 0.079 and it can be classified as acceptable.

The 0.95 and above values of the CFI (Comparative Fit Index) and IFI (Incremental Fit Index) mean “perfect fit” for a model (Bentler, 1990; Çokluk et al., 2008; Hu & Bentler, 1999; Sümer, 2000; Şimşek, 2007;). In our analysis, the values were CFI=0.923 and IFI=0.925. According to these results the data fit of the model is at an acceptable level and the two-factor-structure of the “Curriculum Changes Perception Scale” was affirmed after the fit indexes of confirmatory factor analysis.

#### Reliability Test (Cronbach Alpha)

When CCPS was accepted as a single dimension scale, internal consistency was found 0.89. Also, the explanatory factor analysis showed that the scale consists of two subscales, so Cronbach Alpha tests were applied for these two dimensions. The results are listed in Table 4.

**Table 4.** The Cronbach Alpha and Additivity Test Results of CCPS by Sub-Scales

Subscale	Cronbach Alpha	Source of the Variance	Sum of Squares	Mean Square	F	df	p
Resistance to Applying Curriculum Changes	0.917	Nonadditivity	0.914	0.914	2.782	1	0.096
The effect of Curriculum Change to Teaching/Learning Environment	0.767	Nonadditivity	0.327	0.327	0.699	1	0.403

When Table 4 was analyzed, the reliability value of the first subscale is 0.917 and the second subscale’s value is 0.767. A level more than 0.70 is accepted as high reliability for the scales (Özdamar, 2013). These sub-scales have a high-reliability level and also they are Likert type scales in terms of additivity (Tukey’s Nonadditivity  $p>.05$ ).

#### Teachers’ Perceptions of Curriculum Changes

The descriptive statistics of the 238 teachers’ responses to CCPS are indicated Table 5.

**Table 5.** The Descriptive statistics of the teachers’ responses to CCPS

Subscale	$\bar{X}$	S	Minimum	Maximum
Resistance to Applying Curriculum Changes	17.61	3.01	7	25
The effect of Curriculum Change to Teaching/Learning Environment	19.11	5.29	6	57

The maximum score of the “Resistance to Curriculum Changes” subdimension is 25. The mean score of the 228 teachers for this subdimension is 17.61. According to this, it can be said that teachers have a negative attitude toward applying curriculum changes. The maximum score point for the second subdimension of CCPS is 30 and teachers’ mean score is 19.11. Teachers think that the curriculum changes directly affect the learning/teaching environment. This result seems like a dilemma because teachers have a negative attitude against curriculum changes; however, they find these changes beneficial for their teaching.

### **The Explanation Level of CCPS Of Teachers’ Attitudes Toward Curriculum Changes in Terms of Teachers’ Age, Gender, Educational Status, School Type and Teaching Field**

Logistic regression analysis was performed to see whether teachers’ age, gender, educational status, school type, and teaching field explained their perceptions of curriculum changes. The dependent variable should be categorical to perform this analysis (Özdamar, 2013). The dependent variable of this research is “teachers’ perceptions of curriculum changes”. This is tested with two sub-dimensions defined above. Each participant was coded in the sub-dimension which he/she got a higher point. Because the number of the items in each sub-scale are not equal. The points of the participants were standardized with Z points. By coding the participants in a sub-dimension, the dependent value was transformed into a categorical one.

The participants were coded as regards for some characteristics according to their properties such as age, gender, school of graduation, school types and their branches.

The identified reference groups for logistical regression analysis were “female” for gender; “25 and below” for age; “bachelor’s degree” for educational status; “kindergarten” for school type and “pre-school teacher” for teaching field. The results of “Binary Logistical Regression with Entering Method” were given in Tables 6, 7, 8, 9 and 10.

**Table 6.** Blog “0” Explanatoriness – Preliminary classification status after LRA

Observation		Regression		
		PDUD	PDÖÖOE	Percent
Perceptions of Curriculum Changes	1. Resistance to Applying Curriculum Changes (PDUD)	120	0	% 100
	2. The effect of Curriculum Change to Teaching/Learning Environment (PDÖÖOE)	118	0	0
Total Percentage				% 50.4

According to Table 5, the groups made for perceptions of curriculum changes are explained with a percentage of %50 before the explanatory (predictive) variables are taken into the model. In other words, all of the participants are classified in “the resistance to applying curriculum changes” group, and the correct classification percentage is %50.4.

**Table 7.** Blog “0” Explanatoriness

Observation		Regression		
		PDUD	PDÖÖOE	Percent
Perceptions of Curriculum Changes	1. Resistance to Applying Curriculum Changes (PDUD)	75	45	% 62,5
	2. The effect of Curriculum Change to Teaching/Learning Environment (PDÖÖOE)	34	84	% 71,2
Total Percentage				% 66.8

When Table 7 is analyzed, it can be seen that the groups can be explained with % 66.8 when explanatory variables are taken into the model. The classification of the logistical regression model shows that 75 teachers were classified correctly, and the true classification rate is %62.5. Also, the positive effect of curriculum changes to the classroom settings is %71.2. 84 of the 238 teachers were classified correctly.

**Table 8.** Omnibus Test Related of The Correlations in The Model and Model Summary

		X <sup>2</sup>	Df	p	Cox & Snell R <sup>2</sup>	Nagelkerke R <sup>2</sup>
First Step	Step	38.753	29	0.106	0.150	0.200
	Block	38.753	29	0.106		
	Model	38.753	29	0.106		

The Chi-square is not positive and high enough in Table 6 and this shows that there is not enough improvement from block 1 to block 2. ( $X^2=38.753$ ,  $p>.05$ ). This Chi-square result suggests rejecting the  $H_0$  hypothesis (There is no difference between the starting model (block 0) which only includes constant and the resulting model which also explanatory variables.) This result also does not support the relationship between explained and explanatory variables. Cox & Snell R<sup>2</sup> and Nagelkerke R<sup>2</sup> values show that there is %15-%20 relationship between the dependent and independent variables.

**Table 9.** Hosmer and Lemeshow Test Result

	X <sup>2</sup>	df	p
Block 1	4.662	8	0.793

According to Hosmer and Lemeshow test model fitness is not significant ( $p>.05$ ). This means that the model has an acceptable fitness.

**Table 10.** The Relations in the model

	B	Standart Error	Wald	df	p	Exp (β)
Constant	-0.107	0.989	0.012	1	0.914	0.899
Gender (male)	-0.473	0.346	1.865	1	0.172	0.623
Age (reference group)			6.355	4	0.174	
Age (between 25–34)	2.865	1.728	2.749	1	0.097	17.550
Age (between 35–44)	0.081	1.018	0.006	1	0.937	1.084
Age (between 45–54)	-0.694	0.842	0.680	1	0.410	0.499
Age (more than 55)	-0.071	0.764	0.009	1	0.926	0.932
Graduation (graduate)	0.300	0.383	0.613	1	0.434	1.349
School (reference group)			7.761	4	0.101	
School (primary)	-0.992	1.006	0.972	1	0.324	0.371
School (secondary)	0.005	0.823	0.000	1	0.995	1.005

School (vocational and technical Anatolian high school)	1.126	0.647	3.031	1	0.082	3.082
School (Anatolian high school)	0.806	0.577	1.955	1	0.162	2.240
Branch (reference group)			22.942	19	0.240	
Branch (form)	0.851	0.954	0.796	1	0.372	2.341
Branch (counsellor)	-1.076	0.930	1.340	1	0.247	0.341
Branch (Turkish language and literature)	1.089	1.309	0.692	1	0.406	2.971
Branch (Turkish)	0.076	0.727	0.011	1	0.917	1.079
Branch (science)	-1.764	1.921	0.843	1	0.359	0.171
Branch (social sciences)	1.021	1.413	0.522	1	0.470	2.776
Branch (mathematics)	-0.123	1.031	0.014	1	0.905	0.885
Branch (physics)	-1.630	0.802	4.130	1	<b>0.042</b>	<b>0.196</b>
Branch (chemistry)	-0.315	1.034	0.093	1	0.761	0.730
Branch (biology)	-0.407	0.997	0.167	1	0.683	0.666
Branch (history)	-0.242	0.832	0.084	1	0.771	0.785
Branch (geography)	0.288	0.781	0.136	1	0.712	1.334
Branch (philosophy)	0.464	1.003	0.214	1	0.644	1.590
Branch (vocational)	1.345	1.276	1.111	1	0.292	3.839
Branch (physical education)	0.423	0.727	0.338	1	0.561	1.526
Branch (music)	1.074	1.011	1.128	1	0.288	2.927
Branch (foreign languages)	-1.744	1.584	1.213	1	0.271	0.175
Branch (religion and ethics)	0.429	0.730	0.346	1	0.557	1.536
Branch (others)	0.454	0.907	0.250	1	0.617	1.574

In the variable explained (predicted) in the regression model, the reference groups are “the resistant to implementing program changes (PDUD)”; for the gender, the variable is “female”, for the age that variable is “25 and under”, “the undergraduate graduates” in the graduation variable, “the preschool institution” for the type of school variable, the school in the branch variable. The interpretation of the table is shaped according to these reference groups.

The constant is not significant in the model ( $p > .05$ ). In this case, it cannot be said that any variable other than the explanatory (predictive) variables included in the model explain participation or non-participation in the course.

According to the model, the branch of physics teaching is a significant predictor of resistance to applying changes in the curricula ( $p < .05$ ). If the teacher is a physics teacher, their resistance to applying changes in the curriculum decreases 5.1 times ( $1/0.196$ ).

### Discussion, Conclusion and Recommendations

“Curriculum Changes Perception Scale” is a measurement tool that consists of two sub-dimensions, developed to measure teachers' perceptions of curriculum changes.

“The dimension of resistance to implementing curriculum changes” aims to measure the resistance of teachers against these changes. There are 5 items in this sub-dimension. The items in this sub-dimension are:

- Changes in the curricula are difficult to implement.

- Since the curriculum changes very often, I do not apply the changing curriculum.
- Since the curriculum is shaped by daily politics, I do not apply the changing curriculum.
- Since I prepare students for the exam, I do not consider curriculum changes.
- I do not apply the curriculum changes as they are not scientific.

The highest score that can be obtained from this sub-dimension is 25, and the lowest score is 5. A high score indicates that the level of resistance to the curriculum is high.

The second dimension of the scale is called “The Effect of Curriculum Changes on Learning Environment” and includes the following 6 items.

- Curriculum changes positively affect classroom management.
- As the curriculum changes, the quality of the learning environment increases.
- Curriculum changes reveal students' interests and abilities.
- As the curriculum change, the content of the course becomes more updated.
- Since the information is constantly changing, the curriculum should also change.
- I do not apply the curriculum changes as they are not scientific.

The highest score that can be obtained from this sub-dimension is 30, and the lowest score is 6. Item 11 of the scale should be reverse coded. A high score means that teachers' curriculum changes contribute positively to the learning environment.

The high Alpha coefficients of the sub-dimensions of the scale (resistance to implementing curriculum changes .91, the effect of curriculum change on learning environment .76) indicate that the items in the sub-dimensions are consistent with each other. EFA and CFA result also confirmed the validity of the scale.

Curriculum evaluation is an important part of the curriculum development process (Eryaman, 2010). By evaluating a curriculum which is used in schools, the ministry of education can see the effectiveness and the usefulness of the curriculum. Teachers' views are important at this point as they are the practitioners. Thus, they are the main members of the study groups, when a new curriculum is evaluated or developed (Özdemir, 2009). When teachers somehow resist to the new practices, it becomes hard to speak about the success of that practice. Teachers' resistance to changing curricula is mainly because of their lack of information about new curricula (Bal, 2008; Korkmaz, 2016). It is important to know teachers' perceptions about curriculum changes in order to develop curriculums

which is adopted by teachers. Also, knowing these causes will be a useful data for training in-service teachers as their readiness will directly affect the future success of the whole education system (Karadağ et. al., 2008).

In conclusion, based on validity and reliability studies, it can be said that this scale is applicable in studies to be conducted with teachers. The curriculum is constantly on the agenda of the changes in Turkey, the curriculum is important for teachers' attitudes towards curricula for practitioners. The completion of the curriculum development process and teacher attitudes in the curriculum evaluation process is extremely effective on the success of the curriculum. It is thought that the scale can be used by the policymakers and administrators of the Ministry of National Education, as well as by curriculum development experts.

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## APPENDICES

### Appendix 1. Curriculum Changes Perception Scale

Dear Participant

This scale has been prepared to determine how the changes made in the curricula in Turkey are perceived by teachers. The scale consists of 11 questions that include expressions that will enable us to learn your opinions.

Please read the items and choose the best option that explains your idea. The options are: “Strongly Disagree”, “Disagree”, “Partially Agree”, “Agree”, “Strongly Agree”. The obtained data obtained will only be used in a scientific research. Your sincere answers are important for the reliability of the research. Please do not write your names on the scale.

Item	Statements	Totally Disagree	Disagree	Partially Agree	Agree	Totally Agree
1	It is difficult to implement changes in the curriculum.	①	②	③	④	⑤
2	I do not apply the curriculum that changes because the programs change very often.	①	②	③	④	⑤
3	Since the curriculum is shaped by daily politics, I do not apply the changing program.	①	②	③	④	⑤
4	Curriculum changes increase student motivation.	①	②	③	④	⑤
5	Curriculum changes positively affect classroom management.	①	②	③	④	⑤
6	As the curricula change, the quality of the learning environment increases.	①	②	③	④	⑤
7	Since I prepare the students for the exam, I do not consider the curriculum change.	①	②	③	④	⑤
8	Curriculum changes reveal students' interests and abilities	①	②	③	④	⑤
9	As the curriculum change, the content of the course becomes more updated.	①	②	③	④	⑤
10	Since the information is constantly changing, the curricula must also change.	①	②	③	④	⑤
11	I do not apply the curriculum changes as they are not scientific.	①	②	③	④	⑤

## Appendix 2. Turkish version of Curriculum Changes Perception Scale

Sıra	İfadeler	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1	Programdaki değişiklikleri uygulamak zordur.	①	②	③	④	⑤
2	Programlar çok sık değiştiği için değişen programı uygulamam.	①	②	③	④	⑤
3	Program günlük siyasete göre şekillendiği için değişen programı uygulamam.	①	②	③	④	⑤
4	Program değişiklikleri öğrenci motivasyonunu artırır.	①	②	③	④	⑤
5	Program değişiklikleri sınıf yönetimini olumlu etkiler.	①	②	③	④	⑤
6	Programlar değiştikçe öğrenme ortamının kalitesi artar.	①	②	③	④	⑤
7	Öğrencileri sınava hazırladığım için program değişikliğini dikkate almam.	①	②	③	④	⑤
8	Program değişiklikleri öğrencilerin ilgi ve yeteneklerini ortaya çıkarır.	①	②	③	④	⑤
9	Programlar değiştikçe dersin içeriği daha güncel hale gelir.	①	②	③	④	⑤
10	Bilgi sürekli değiştiği için program da değişmelidir.	①	②	③	④	⑤
11	Program değişiklikleri bilimsel olmadığı için uygulamam.	①	②	③	④	⑤