

Evaluation of Teachers' Motivation and Curriculum Autonomy Levels¹

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Abstract

The aim of this research is to evaluate teachers' motivation and curriculum autonomy levels. The research is quantitative and descriptive and designed according to the survey model. The sample of the research consisted of 340 teachers who have been reached by simple random sampling method who have been worked in public primary and secondary schools in Istanbul. Motivation Scale developed by Gagné, Forest, Gilbert, Aube, Morin, and Malorni (2010) and adapted into Turkish by Çevik and Köse (2017) has been used to determine teachers' motivation levels. Teachers' curriculum autonomy levels have been determined with The Teacher Autonomy Scale developed by Yolcu (2019). According to the research results, teachers' motivation and curriculum autonomy levels are high. It has been examined whether the motivation and curriculum autonomy levels of teachers differ significantly according to the variables gender, professional seniority, educational status and the number of projects participated in professional life. It has been found that the levels of motivation differ significantly according to gender and the levels of curriculum autonomy differ according to number of projects participated in professional life. Finally, the research has revealed that there is a medium-level, positive and significant relationship between teachers' motivation and curriculum autonomy levels.

Keywords: Motivation, Teacher Motivation, Curriculum Autonomy

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Introduction

Rapid changes and transformations in education and science cause changes in the needs of students and teachers as well as the need for new regulations regarding the educational process (Yazıcı, 2016). In other words, these changes bring new responsibilities to the field of education (Lee, 2014). Education is expected to raise individuals who can understand the problems arising in the national and international arena, interpret them with a critical point of view, and express constructive thoughts by actively participating in social life in the context of democratic principles and elements. The teacher element comes to the fore in meeting the constantly changing expectations during the education process. The teacher is expressed as the driving force of change and a factor that makes a difference in the educational renewal process (Julião, 2018). In other words, the teacher is an important figure that controls and balances the education process (Sehrawat, 2014).

It is thought that teachers with high motivation are needed for this process to be effective and efficient. As a matter of fact, as Özbilen, Günay and Yıldız (2020) stated, teacher motivation stands out as an important component of teacher quality. Teacher motivation is necessary for the education and training process in order to motivate students to learn, to realize educational reforms through teachers, and to ensure teachers' own personal satisfaction (Neves de Jesus & Lens, 2005). Teacher motivation also has a role that affects job success (Sari & Yetkiner, 2020). In addition, it can be said that teacher motivation will contribute to the redesign of the applied national education curriculums in accordance with the current situation. In this respect, it can be said that the centrally prepared curriculum has the potential to reduce the gap between the educational goals that teachers expect to realize and the real learning needs of students. As Julião (2018) stated, teachers have responsibilities in ensuring that the elements that make up the central curriculum comply with the real learning needs at the local level. Again, as stated by the researcher, teachers have a significant role in the regulation of education-training processes, that is, in making the curriculum functional, independent of the basic paradigm of the applied education curriculum. Therefore, there is a need for teachers who can organize the central education curriculum by using the principles of curriculum autonomy as a catalyst with their critical and relational skills in the context of local conditions and student needs for an effective education process. As a matter of fact, as Wu (2015) stated, teachers' high curriculum autonomy increases the motivation for participating in school activities. In this context, when teacher motivation is considered as a factor affecting the quality of the education process, such as curriculum autonomy, it is thought that qualified education can be provided by motivated teachers who have curriculum autonomy.

Motivation, in the most general sense, is expressed as the processes that activate and maintain human behavior (McMillan & Forsyth, 1991). In the expression of Tohid and Jabbari (2012), motivation in human behavior; it is a driving force that directs, controls and resists. Şeker (2015)

states that the concept of motivation is a term used to explain a certain behavior and that motivation is the motive behind people's actions. Based on the definitions, motivation can be expressed as the driving force (energy) that directs people to behavior. In the context of the educational process, it can be said that motivation is a force that directs students to learn and teachers to the teaching process. Teacher motivation includes both a desire for teaching and a personal approach towards students. The teacher's personal motivation is explained by her enthusiasm in the teaching process and her professional satisfaction (Revee & Su, 2014). Han and Yin (2016) define teacher motivation as an effort to teach with intrinsic values associated with teaching and maintaining teaching, and state that this concept is influenced by many contextual factors. It can be said that this enthusiasm towards the teaching process can have a positive effect on student learning. As a matter of fact, studies in the literature show that teacher motivation has a positive effect on students' academic achievement (Akhtar, 2013; Akhtar, Iqbal, & Tatlah, 2017; Hayden, 2011). As Özbilen et al. (2020) stated, teacher motivation positively affects all factors related to the education and training process. Therefore, considering the prominent role of the teacher in the education process, it can be said that teacher motivation is an important factor affecting the quality of education. As stated by Watt and Richardson (2008), it is important to determine teachers' motivations in order to better understand teachers' responsibilities, commitment and determination in order to understand the factors and processes underlying teacher quality. If teachers' motivation is high, their teaching to students will be more effective, they will be able to increase their efficiency by collaborating more with their colleagues, and they will be able to bring more innovation to the process (Kotherja & Rapti, 2015). In addition, since teacher motivation is important in terms of student motivation, teaching process, teachers' satisfaction and well-being, administrators also have an important responsibility on teacher motivation (Han & Yin, 2016).

Motivation is closely related to needs. An employee gets motivated when his/her needs are met. In other words, employees' needs affect their motivation. Needs can be viewed as physiological or psychological deficiencies that trigger the behavior. They can be strong or weak and are influenced by environmental factors, so a person's needs may vary at different times and in different places, and they must be met (Utomo, 2018). It can be said that meeting psychological needs in particular plays an important role in professional success and satisfaction. According to the self-determination theory, intrinsic and extrinsic sources of motivation affect professional performance. The theory also suggests that professional satisfaction is greater in work environments where intrinsic motivation is provided (Worth & Van den Brande, 2020). Deci and Ryan (2008) state that the existence of three psychological needs, namely professional competence, professional autonomy, and relations with colleagues, increases intrinsic motivation. Therefore, the theory points out that teachers' being autonomous in the teaching process can increase their intrinsic motivation. In addition, Yıldırım

(2021) suggests that, with an approach that overlaps with the theory, mechanisms that support school autonomy should be established in order to increase teachers' intrinsic motivation.

Gender plays an important role in determining motivation. Meece, Glienke and Burg (2006) state that motivational beliefs develop depending on stereotypes based on gender roles. The teaching profession is perceived as a female profession according to the results of the study based on social perception (Yaman, 2001). In this respect, it can be said that the motivation levels of teachers may differ depending on gender. As a matter of fact, it is striking that many studies compare the motivation levels of teachers according to the gender variable (Bastick, 2000; Ertürk, 2016; Triyanto, 2016). Except for gender in the literature; studies also suggesting that teachers' motivation levels differ according to the variables of professional seniority (Gokce, 2010; Uğraş & Özen, 2019), educational status (Çevik & Köse, 2017; Çiftçi, 2017; Emiroğlu, 2017; Triyanto, 2016; Ugar, 2019) and participation in professional projects (Gorozidis, & Papaioannou, 2014; Iliya & Ifeoma, 2015; Schellenbach-Zell & Gräsel, 2010) draw attention. In this respect, it can be said that the variables of gender, professional seniority, educational status and participation in professional projects may be factors that differentiate teacher motivation.

The concept of autonomy literally means “self-management”, “independence” or “self direction” (Collier, 2002; Ryan & Deci, 2006). In the words of Yolcu and Akar-Vural (2020), autonomy is the ability of an individual to have a say over her own choices and actions. In the context of education, autonomy is expressed as “independent learning capacity” (Dickinson, 1995). In other words, it is the capacity to take responsibility and control our own learning (Little, 1995). Teacher autonomy is simply defined as “the freedom to learn and teach” (Sehrawat, 2014). The concept is also described as reflecting the teacher's own choices and decisions to the educational processes in the classroom (Öztürk, 2011). Teacher autonomy is also defined as teachers' capacity to control their own teaching processes (Sehrawat, 2014) or “teachers' willingness, capacity and freedom to control their own teaching and learning” (Huang, 2005, p. 206). Considering the contexts of the profession, Canbolat (2020) defines teacher autonomy as “the freedom of the teacher to make decisions regarding the development and implementation of the education and training curriculum, materials, and school management and other professional activities” (p. 142). Indeed, teacher autonomy serves as an umbrella for innovations in teacher education and ongoing teacher development. In this context, with the autonomy of teachers, it is possible for them to interpret the ideas about teaching and learning with others to make them more meaningful and realistic and to identify unique teaching-learning situations in order to find new answers to the problems encountered (Mello, Dutra & Jorge, 2008).

The concept of curriculum autonomy is generally considered as a sub-dimension of teacher/teaching autonomy in the literature. As a matter of fact, Öztürk (2011) states that teacher autonomy includes three main elements as “planning and implementation of teaching, active

participation in decision-making processes of school administration and developing professional knowledge and skills” (p. 86). It can be said that the dimension stated by Öztürk (2011) as planning and implementation of teaching indicates curriculum autonomy in context. Silberstein and Ben-Peretz (1987) express that teachers produce ideas by evaluating the intended curriculum and develop new curriculums as the relationship between teacher autonomy and the curriculum dimension. Julião (2018) likewise points out that curriculum autonomy is a prominent concept in curriculum restructuring and development. Little (1995), on the other hand, defines teachers as successful teachers who take responsibility for their own teaching processes and provide the highest level of emotional and cognitive control of the teaching process through continuous thinking and analysis, and also emphasizes the importance of curriculum autonomy in one aspect. Curriculum autonomy is simply defined as the ability of teachers to take an active role in the development of the curriculum and to provide flexibility in the curriculum during the implementation process (Ben-Peretz, 1980). Lee (2014) states that curriculum autonomy contributes to filling the gap between what is expected from the intended curriculum and reality. According to Park (2008), curriculum autonomy can be expressed as teachers’ designing national curriculums to meet local contexts and the needs of students (cited in Hong & Youngs, 2016). Similarly, Morgado (2011, p. 397) defines curriculum autonomy as “the ability to generate ideas in the adaptation of the intended curriculum at the national level in the process of developing national curriculum, and to adapt the curriculum to the characteristics of the students, needs and the region where the school is located” (as cited in Julião, 2018, p. 4). Based on these definitions, curriculum autonomy can be defined as the capacity of teachers to redesign all aspects of the curriculum (purpose, content, learning-teaching process, evaluation) in order to adapt the nationally aimed curriculums to local conditions, student interests and learning needs.

When the literature is reviewed, it is seen that curriculum autonomy is examined as a sub-dimension of teacher autonomy in many studies (Moomaw, 2005; Pearson & Moomaw, 2005; 2006; Ulaş & Aksu, 2015). When looking at the studies on teacher autonomy, studies that examine and emphasize the relationship between teachers’ behaviors of supporting teacher autonomy and learner autonomy (Lamb, 2008; Little, 1995; Smith, 2003; Yazıcı, 2016) and studies examining the relationship between teacher autonomy and student achievement (Ayril et al., 2014; Gurganious, 2017) draw attention. In addition, studies comparing teachers’ curriculum autonomy levels depending on gender and professional seniority (Behroozi & Osam, 2016; Çolak, Altinkurt & Yılmaz, 2017; Yazıcı, 2016), educational status (Behroozi & Osam 2016) and participation in professional projects (Yolcu, 2019) draw attention. Within the scope of this study, it can be said that the variables of gender, professional seniority, educational status and participation in professional projects may be factors that can affect the level of curriculum autonomy of teachers.

In the context of the main subject of the research, there are a limited number of studies that reveal a significant relationship between the two variables in studies on teacher motivation and

teacher autonomy (Worth & Van den Brande, 2020; Wu, 2015). In addition, there is no study in the literature that can be considered as an important sub-component of teacher autonomy, examining teacher curriculum autonomy and teacher motivation together and aiming to reveal the link between the two variables. Motivation and curriculum autonomy are mainly teacher-driven important factors that can affect the efficiency of the educational process. In this respect, the research is considered important as it tries to determine the motivation and curriculum autonomy levels of teachers and to determine the relationship between these two variables. In addition, the research is also important in terms of shedding light on the effects of these factors, which have an important place in increasing teacher qualifications.

Purpose of the Research

The purpose of this research is to evaluate teachers' levels of motivation and curriculum autonomy. In line with this main purpose, the following sub-goals have been seek answers:

1. What are the teachers' motivation and curriculum autonomy levels?
2. Do teachers' motivation levels differ significantly according to the variables of gender, professional seniority, educational status and number of projects participated in professional life variables?
3. Do teachers' curriculum autonomy levels differ significantly according to gender, professional seniority, educational status and number of projects participated in professional life variables?
4. Is there a significant relationship between teachers' motivation and curriculum autonomy levels?

Method

In this section, information about the research model, research sample, data collection tools, data analysis and validity and ethical considerations have been given.

Research Model

This research is based on the positivist paradigm. The positivist paradigm advocates that researchers try to explain the phenomenon studied in the most economical way using quantitative research methods and adapt the results reached to other situations with inductive inferences (Kivunja & Kuyini, 2017). In this context, this research is descriptive and has been designed according to the survey model. Survey models are based on presenting the existing situation as it is and with an objective approach (Karasar, 2009). In this research, it has been tried to evaluate the motivation and curriculum autonomy levels of teachers working in schools affiliated to the Ministry of National Education.

Research Population

The population of the study consisted of 2823 teachers working in public primary and secondary schools in Avcılar and Esenyurt districts of Istanbul during the first half of the 2019-2020 academic year. The reason why these districts have been chosen as the universe is that the first researcher has worked as an administrator in District National Education Directorate of Avcılar and the third researcher has worked as a school principal in Esenyurt. In this context, the distribution of teachers in the research population on district basis and as school grade has been given below:

Table 1. Research Population

Schools	Avcılar District		Esenyurt District		Total	
	f	%	f	%	f	%
Primary School	482	17.07	582	20.62	1064	37.69
Secondary School	791	28.02	968	34.29	1759	62.31
<i>Total</i>	<i>1273</i>	<i>45.09</i>	<i>1550</i>	<i>54.91</i>	<i>2823</i>	<i>100</i>

Research Sample

The sample of the study is 340 teachers who have been reached by simple random sampling method who have been worked in public primary and secondary schools in Avcılar and Esenyurt districts of Istanbul in the first semester of the 2019-2020 academic year. At the stage of determining the research sample, the sampling error has been accepted as 0.05 and the minimum number expected to be included in the sample was calculated with the following formula as Saka (2004) also stated:

$$n = \frac{N t^2(p,q)}{d^2(N-1)+t^2(p,q)} \quad n = \frac{2823 (1.96 \times 1.96)(0.5 \times 0.5)}{0.05^2 (2823-1)+ 1.96^2 (0.5 \times 0.5)} = 338.25$$

In the above formula, n is the number of teachers in sample (338.25), N is the number of teachers in the population (2823), p is the frequency of the situation being investigated (0.5), q is the frequency of the situation being investigated (0.5), d is the sampling error (0.05) and t is the accepted significance level (the value corresponding to 0.05 is 1.96). Considering the specified population value, it is seen that more people have participated in the study than the number of the calculated sample. The distribution of the teachers who constitute the sample of the research according to their demographic characteristics has been given in Table 2 below.

Table 2. Distribution of the teachers in the sample according to their demographic characteristics

Independent variables	Groups	f	%
Gender	Female	225	66.0
	Male	115	34.0
	<i>Total</i>	<i>340</i>	<i>100</i>
Professional Seniority	1-10 years	167	49.0
	11-20 years	114	34.0
	21 years and above	59	17.0
	<i>Total</i>	<i>340</i>	<i>100</i>

Educational Status	Undergraduate	267	78.5
	Graduate	73	21.5
	<i>Total</i>	<i>340</i>	<i>100</i>
Number of Projects Participated in Professional Life	Never participated	93	27.0
	1-2 times	142	42.0
	3 and above	105	31.0
	<i>Total</i>	<i>340</i>	<i>100</i>

When Table 2 above is examined, it is seen that 225 of the teachers are women and 115 are men in the sample group. In addition, 167 of the same teachers have a seniority of 1-10 years, 114 of them 11-20 years, and 59 of them 21 or more years. 267 of these teachers' educational status are undergraduate education and 73 of them are graduate education. Finally, 93 of these teachers have not involved in any project in their professional lives, while 142 of them have taken part in 1-2 times and 105 of them 3 or more projects.

Data Collection Tools

"The Motivation Scale" developed by Gagné, Forest, Gilbert, Aube, Morin and Malorni (2010) and adapted to Turkish by Çevik and Köse (2017) and "Curriculum Autonomy Scale" developed by Yolcu (2019) have been used as data collection tools in the research.

The Motivation Scale used to determine teachers' motivation levels is a five-point Likert-type scale and it is answered as "I do not agree at all (1), I do not agree (2), I have no idea (3), I agree (4), and I completely agree (5)". The scores that can be obtained from the 12-item scale range between 12 and 60. While the scale has been adapted to Turkish, it is seen that the four-dimensional structure of the scale has been preserved during the exploratory factor analysis process in testing the construct validity. These dimensions are in the form of "intrinsic motivation", "identified regulation", "internalized regulation" and "external regulation". After the exploratory factor analysis, confirmatory factor analysis has been also performed for construct validity. In this process, Chi-Square Fit Test value has been found as 2.4, CFI value as .962, TLI value as .945 and RMSEA value as .067. Considering these values Chi-Square Fit Test, CFI, RMSEA values are within good fit (Schermelleh-Engel, Moosbrugger & Müller, 2003); TLI value is within acceptable compliance limits (Hu, & Bentler, 1999). Within the scope of reliability analysis, the Cronbach Alpha value has been calculated as .88 for the whole scale. The Cronbach Alpha value has been calculated for the reliability analysis in this research is .809. This value can be evaluated as giving reliable results regarding the usability of the scale on the sample group studied.

The Curriculum Autonomy Scale is a five-point Likert-type scale used to determine teachers' curriculum autonomy levels and it is answered as "Never (1), Rarely (2), Occasionally (3), Very often (4) and Always (5)". The scores that can be obtained from the 13-item scale range between 13 and 65. Exploratory and confirmatory factor analyses have been conducted to determine the construct validity during the development process of the scale. Yolcu (2019) first performed the Kaiser-Meyer-Olkin

(KMO) test to test the sample size and Bartlett’s test of sphericity to examine the normality distribution of the data. As a result of the exploratory factor analysis performed after the values found, a total of 13 items and a 4-factor scale structure that explains 67.44% of the total variance has been reached. These dimensions are in the form of “professional development autonomy”, “process autonomy”, “assessment autonomy” and “planning autonomy”. Afterward, the researcher has conducted a confirmatory factor analysis in order to support the 4-factor structure of the scale. In this process, Chi-Square Fit Test value has been found as 1.47, CFI value as .98, RMSEA value as .052 and RMR value as .05. Additionally GFI value has been found as .93, AGFI value as .89 and SRMR value as .06 has been found. Considering these values Chi-Square Fit Test, CFI, RMSEA and RMR values are within good fit and GFI, AGFI and SRMR values are within acceptable compliance limits (Schermelleh-Engel et al., 2003). Those values have shown that the original structure of the scale has been supported. Within the scope of the researcher reliability analysis, the Cronbach Alpha value has been calculated as .91 for the whole scale. In this research, the Cronbach Alpha value has been calculated for the reliability analysis and found as .835. This value can be evaluated as giving reliable results regarding the usability of the scale on the sample group studied.

Data Analysis

The answers of the teachers regarding the scales prepared on the internet through Google forms has been downloaded to the computer as an Excel file and transferred to the SPSS v.22 package program. Afterwards, in line with the teachers’ responses to the Motivation Scale and Curriculum Autonomy Scale, the normality distribution of the data has been examined and the analyzes has been carried out accordingly. In this context, the descriptive statistics values obtained from the Motivation Scale are detailed in Table 3 below.

Table 3. Descriptive statistics obtained from the Motivation Scale and Sub-dimensions of the Scale

Scale and Sub-dimensions	N	\bar{X}	Median	Mode	sd	Skewness	Kurtosis	Min. Max. Values
Motivation Scale	340	3.56	3.58	3.58	.53	-.426	.422	1.92-4.75
<i>Intrinsic Motivation</i>	340	4.39	4.33	5.00	.62	-.843	.892	1.67-5.00
<i>Identified Regulation</i>	340	3.94	4.00	4.00	.81	-.813	.519	1.33-5.00
<i>Internalized Regulation</i>	340	3.32	3.33	3.33	.92	-.318	-.386	1.00-5.00
<i>External Regulation</i>	340	2.59	2.67	2.67	.61	.202	.188	1.00-4.33

When Table 3 above is examined, it is seen that the values of skewness and kurtosis coefficients of the data in the Motivation Scale and sub-dimensions of the scale are between -1 and +1. These values indicate that the data show a normal distribution (Tabachnick & Fidell, 2013). In

addition, since the mean, median and mode values are seen to be close to each other, it can be said that the data show a normal distribution (Büyüköztürk, 2010).

The descriptive statistics values obtained from the Curriculum Autonomy Scale and sub-dimensions of the scale are detailed in Table 4 below.

Table 4. Descriptive statistics obtained from the Curriculum Autonomy Scale and Sub-dimensions of the Scale

Scale and Sub-dimensions	N	\bar{X}	Median	Mode	sd	Skewness	Kurtosis	Min. Max. Values
Curriculum Autonomy Scale	340	3.82	3.77	3.62	.53	.023	-.035	2.08-5.00
<i>Professional Development</i>	340	3.58	3.67	3.00	.84	-.189	-.255	1.00-5.00
<i>Process Autonomy</i>	340	4.12	4.00	4.00	.59	-.443	.304	2.00-5.00
<i>Assessment Autonomy</i>	340	4.01	4.00	4.00	.67	-.499	.829	1.00-5.00
<i>Planning Autonomy</i>	340	3.49	3.33	3.00	.89	-.044	-.402	1.00-5.00

When Table 4 above is examined, it is seen that the values of skewness and kurtosis coefficients of the data in the Curriculum Autonomy Scale and sub-dimensions of the scale are between -1 and +1. In addition, it can be said that the data in the scale and its sub-dimensions show a normal distribution, since the mean, median and mode values are also close to each other.

In the study, in order to make comparisons between groups in the independent variables, whether the data in these groups meet the normality assumptions has been also examined with descriptive statistics. In this context, descriptive statistics values obtained from the groups in the independent variables of gender, education status, professional seniority and number of projects participated in professional life for the Motivation Scale are detailed in Table 5 below.

When Table 5 below is examined, it is seen that the values of the skewness and kurtosis coefficients of the data in the independent variables for the Motivation Scale are between -1 and +1. In addition, since the mean, median and mode values are also close to each other, it can be said that the data in each of the independent variables show normal distribution separately.

Table 5. Descriptive statistics for Motivation Scale obtained from independent variables of gender, educational status, professional seniority and number of projects participated in professional life

Independent Variable	Group	N	\bar{X}	Median	sd	Skewness	Kurtosis
Gender	Female	225	3.60	3.58	.49	-.359	.637
	Male	115	3.48	3.50	.58	-.395	-.026
Educational Status	Undergraduate	267	3.58	3.58	.53	-.455	.385
	Graduate	73	3.49	3.50	.51	-.368	.822

Professional Seniority	1-10 years	167	3.60	3.58	.52	-.413	.711
	11-20 years	114	3.54	3.58	.54	-.523	.378
	21 years and above	59	3.50	3.58	.53	-.277	.030
Number of projects participated in professional life	Never participated	93	3.53	3.50	.50	-.157	.203
	1-2 times participated	142	3.57	3.58	.53	-.599	.590
	3 and above times participated	105	3.57	3.58	.55	-.424	.530

In addition, before determining which test types to be used in the analysis of the data, it has also been examined whether the data in the independent variables provided the normality assumptions. Descriptive statistics values obtained from the groups in the independent variables of gender, education status, professional seniority and number of projects participated in professional life for the Curriculum Autonomy Scale are detailed in Table 6 below.

When Table 6 below is examined, it is seen that the values of the skewness and kurtosis coefficients of the data in the independent variables for the Curriculum Autonomy Scale are between -1 and +1. In addition, since the mean, median and mode values are also close to each other, it can be said that the data in each of the independent variables show normal distribution separately. For this reason, Independent Samples t-Test and One-Way Analysis of Variance (ANOVA), which are among parametric tests, have been performed in order to compare dependent variables for independent variables in the analysis of the data. In addition, the Pearson Product-Moments correlation coefficients (r) have been calculated to examine the relationship between two dependent variables, namely motivation and curriculum autonomy.

Table 6. Descriptive statistics for Curriculum Autonomy Scale obtained from independent variables of gender, educational status, professional seniority and number of projects participated in professional life

Independent Variable	Group	N	\bar{X}	Median	sd	Skewness	Kurtosis
Gender	Female	225	3.85	3.77	.54	.142	-.275
	Male	115	3.77	3.69	.50	-.310	.423
Educational Status	Undergraduate	267	3.80	3.77	.53	.021	-.056
	Graduate	73	3.90	3.85	.52	.046	.121
Professional Seniority	1-10 years	167	3.79	3.77	.50	-.026	.141
	11-20 years	114	3.87	3.85	.52	.150	-.199
	21 years and above	59	3.82	3.77	.61	-.068	-.281
Number of projects participated in professional life	Never participated	93	3.62	3.54	.52	.178	-.061
	1-2 times participated	142	3.79	3.77	.49	.152	-.206
	3 and above times participated	105	4.04	4.00	.51	-.265	.972

Validity and Ethical Considerations

For the validity of the research, it is important that all three researchers are educational sciences experts. In line with the purpose of the research, firstly the literature have been searched and

scales suitable for data collection have been determined. Afterwards, permission for use have been obtained from the researchers who adapted and developed the scales through e-mail. The teachers participating in the study have been diversified according to certain demographic characteristics and the opportunity to make comparisons between groups have been obtained. The data have been obtained by sharing the access link regarding the scale forms on the internet. In this regard, the purpose and scope of the research have been clearly stated at the beginning before personal information and scale questions. The demographic characteristics of the teachers participating in the research in terms of reliability have been clearly stated in the sample part of the research. The data in the research have been collected with the voluntary participation of teachers. Based on the answers has been obtained in the data analysis section, reliability coefficients for both scales has been calculated and the findings obtained through the analysis have been reported clearly.

Results

In this section, the results obtained after the analysis of the research data have been given in order.

Results Regarding Teachers' Motivation and Curriculum Autonomy Levels

According to Table 3 above, the arithmetic mean of the scores obtained from the 12-item Motivation Scale is $\bar{X}=3.56$. In this context, it can be said that teachers' motivation levels are high. According to Table 4 above, the arithmetic mean of the scores obtained from the 13-item Curriculum Autonomy Scale is $\bar{X}=3.82$. This value indicates that teachers' level of curriculum autonomy is high as well. These values show the findings that both motivation and curriculum autonomy levels increase as the scores obtained from both scales increase.

Results Regarding the Comparison of Teachers' Motivation and Curriculum Autonomy Levels for Independent Variables

In the Table 7 below, the findings for the Independent Samples t-Test conducted to determine whether the motivation and curriculum autonomy levels of teachers differ significantly according to the variables of gender and educational status have been given.

Table 7. Results for the Independent Samples t-Test conducted to examine the average scores of teachers' motivation and curriculum autonomy levels according to the variables of gender and educational status

Dependent Variable	Independent Variable	Group	N	\bar{X}	ss	sd	t	p
Motivation Level	Gender	Female	225	3.60	.49	338	2.113	.035*
		Male	115	3.48	.58			
Curriculum Autonomy Level	Gender	Female	225	3.85	.54	338	1.207	.228
		Male	115	3.77	.50			
Motivation Level	Educational Status	Undergraduate	267	3.58	.53	338	1.366	.173
		Graduate	73	3.49	.51			
Curriculum Autonomy Level	Educational Status	Undergraduate	267	3.80	.53	338	-1.481	.139
		Graduate	73	3.90	.52			

*p<0.05

When the Table 7 above is examined, the arithmetic mean of the scores related to the motivation levels of the teachers does not show a significant difference according to the variables of education level ($p > .05$). However, it has been determined that the arithmetic mean of the scores regarding the motivation levels of the teachers has showed a significant difference according to the gender variable [$t(338) = 2.113, p < .05$]. In this context, it has been revealed that female teachers ($\bar{X} = 3.60$) have higher motivation levels than male teachers ($\bar{X} = 3.48$). This finding reveals that teachers' motivation levels can differ significantly according to gender. Again, according to Table 7, it has been determined that the arithmetic mean of the scores the teachers get regarding the curriculum autonomy levels have not show a significant difference according to the variables of gender and education level ($p > .05$).

In Table 8 below, the findings of Single Factor Analysis of Variance (ANOVA) for Independent Samples have been given to determine whether teachers' motivation and curriculum autonomy levels differ significantly with respect to professional seniority variable.

Table 8. Results for One-Way Analysis of Variance (ANOVA) for independent samples conducted to examine teachers' motivation and curriculum autonomy levels according to professional seniority variable

Dependent Variable	Independent Variable	Source of Variance	Sum of Squares	df	Mean Squares	F	p	Significant Difference
Motivation Level	Professional Seniority	Between Groups	.466	2	.233	.839	.433	-
		Within Groups	93.528	337	.278			
		<i>Total</i>	<i>93.994</i>	<i>339</i>				
Curriculum Autonomy Level	Professional Seniority	Between Groups	.460	2	.230	.825	.439	-
		Within Groups	93.842	337	.278			
		<i>Total</i>	<i>94.301</i>	<i>339</i>				

According to the data in Table 8, the average scores of teachers regarding motivation levels do not show a significant difference according to the professional seniority variable [$F(2, 337) = .839, p > .05$]. This finding can be interpreted as that the motivation levels of teachers do not change significantly depending on professional seniority. Likewise, the average scores of teachers regarding curriculum autonomy levels do not show a significant difference according to the professional seniority variable [$F(2, 337) = .825, p > .05$]. This finding can be interpreted as that teachers' curriculum autonomy levels do not change significantly depending on their professional seniority.

In the following Table 9, the findings of One-Way Analysis of Variance (ANOVA) have been given to determine whether teachers' motivation and curriculum autonomy levels differ significantly according to the variable of the number of projects involved in professional life.

Table 9. Results for One-Way Analysis of Variance (ANOVA) conducted to examine teachers' motivation and curriculum autonomy levels according to the variable of the number of projects participated in professional life

Dependent Variable	Independent Variable	Source of Variance	Sum of Squares	df	Mean Squares	F	p	Significant Difference
Motivation Level	Number of projects participated in professional life	Between Groups	.111	2	.055	.199	.820	-
		Within Groups	93.883	337	.279			
		<i>Total</i>	<i>93.994</i>	<i>339</i>				
Curriculum Autonomy Level	Number of projects participated in professional life	Between Groups	8.958	2	4.479	17.686	.000	B>A C>A
		Within Groups	85.344	337	.253			
		<i>Total</i>	<i>94.301</i>	<i>339</i>				

* p<.05, A: Never participated; B: 1-2 times; C: 3 times and above

According to the data in Table 9, the average scores of teachers regarding motivation levels do not show a significant difference according to the variable of the number of projects participated in professional life [F (2, 337) = .199, p>.05]. This finding can be interpreted as that the motivation levels of teachers do not change significantly depending on the number of projects participated in professional life. However, according to Table 9, the average scores of teachers regarding curriculum autonomy levels show a significant difference according to the variable of number of projects participated in professional life [F (2, 337)= 17.686, p>.05]. According to the results of the Scheffe test conducted to determine between which groups have a significant difference, teachers who has participated 1-2 times (\bar{X} =3.79) and 3 or more (\bar{X} =4.04) projects in professional life has been found higher levels of curriculum autonomy than those who has never participated in the project (\bar{X} =3.62). Depending on these findings, it can be said that with the increase in the number of teachers' participation in projects in professional life, their level of curriculum autonomy also increases.

In Table 10 below, the relationship between teachers' motivation and curriculum autonomy levels and the sub-dimensions related to them is tried to has been examined. Results regarding the Simple Linear Correlation Analysis performed within this context have been given.

Table 10. Results regarding the relationship between teachers' motivation and curriculum autonomy levels and sub-dimensions

	Professional Development Autonomy	Process Autonomy	Assessment Autonomy	Planning Autonomy	Curriculum Autonomy
Identified Regulation	.381**	.405**	.193**	.276**	.442**
Intrinsic Motivation	.218**	.184**	.112*	.113*	.220**
Introjected Regulation	.248**	.263**	.205**	.053	.261**
External Regulation	.036	-.025	.050	-.089	-.015
Motivation	.314**	.296**	.203**	.121*	.324**

** : significant at .01 level, p <.01; * significant at level of .05, p <.05

In Table 10 above, it is seen that there is a moderately positive and significant relationship between teachers' motivation and curriculum autonomy levels ($r=.324$, $p<.01$). In addition, it is seen that the highest relationship with the curriculum autonomy of teachers is in the sub-dimension of motivation identified with the regulation ($r=.442$, $p <.01$). On the other hand, no significant relationship has been found between the mean scores of teachers' curriculum autonomy and sub-dimensions of curriculum autonomy with the external regulation sub-dimension of motivation. Accordingly, it can be said that the level of motivation for external regulation does not affect teachers' level of curriculum autonomy. In other words, teachers' level of curriculum autonomy is not significantly affected by the sub-dimension of motivation related to external regulation.

Discussion, Conclusion and Recommendations

The following results have been obtained in this research, which deals with teachers' motivation and curriculum autonomy levels and in which 340 teachers participated: In the research, it has been determined that teachers' motivation levels is high ($\bar{X}=3.56$). Considering the fact that the motivation increases with the increase in the scores obtained from the Motivation Scale, this result can be accepted as high level. Similarly, in the studies of Çevik and Köse (2017), Çobanoğlu ve Barutçu (2020), Uçar and Dağlı (2017) and Keller, Neumann and Fischer (2017), it has been found that teachers' motivation is at a high level. On the contrary, there are studies that indicate that teachers' motivation is at medium level (Memişoğlu & Kalay, 2017; Sucu, 2016; Ugar, 2019) and low level (Barlı, Bilgili, Çelik, & Bayrakçeken, 2005; Yılmaz, 2017). These different results are thought to be due to the fact that the studies examining teacher motivation has been conducted in different regions and the factors motivating teachers are different from each other. In this context, it is thought that teachers' motivation should be increased so that they can take a more active role in the education-training process, enrich the teaching-learning process, take more responsibility and increase their commitment to their profession.

In the research, it has been determined that the motivation levels of the teachers differ significantly according to the gender variable, but not according to the variables of education level, professional seniority and the number of projects participated in professional life. When the differentiation between teachers' motivation levels according to gender variable is examined, it has been determined that female teachers ($\bar{X}=3.60$) have higher motivation than male teachers ($\bar{X}=3.48$). Similarly, Emiroğlu (2017) has concluded that the motivation levels of female teachers differ significantly from male teachers. However, Triyanto (2016) has found that male teachers' motivation is higher than female teachers. The researcher has interpreted this situation as male teachers want to be more successful in their professional career. On the contrary, there are studies that found that teachers' motivation levels do not differ significantly according to gender (Çevik & Köse, 2017; Çobanoğlu & Barutçu 2020; Sarı, Canoğulları, & Yıldız, 2018; Taşkesen, Taşkesen, Bakırhan, &

Tanoğlu, 2018; Urhan, 2018). It is thought that these differences may arise from the perspective of the teaching profession and the roles of the teaching profession regarding women or men in the countries where the studies has been conducted.

In the analysis according to the educational status variable, it has been found that graduating from undergraduate or graduate programs does not cause a significant motivation difference in teachers. Similarly, Çevik and Köse (2017), Çiftçi (2017) and Emiroğlu (2017) also has concluded that teachers' motivation levels have not differ significantly according to their educational status. Ugar (2019) also has found that there are no significant differences in the intrinsic and extrinsic motivations of teachers according to their educational status. On the contrary, in Triyanto's (2016) research, it has been found that the motivation of teachers with undergraduate education is higher than those with a master's degree. She has stated that this might be due to the fact that teachers who have a master's degree think they have sufficient knowledge and do not need to participate in capacity building curriculums. It is thought that this result of the present research may have been taken for different individual or career purposes of graduate education and therefore does not make a significant difference on motivation.

When the motivation levels of teachers in terms of professional seniority has been examined, no significant difference in motivation has been found among teachers with a professional seniority of 1-10 years, 11-20 years and 21 years or more. In parallel with this research result, Çiftçi (2017), Çobanoğlu and Barutçu (2020), Emiroğlu (2017) have concluded that the motivation levels of teachers for their professional seniority do not differ. On the contrary, in Triyanto's (2016) research, it has been determined that teachers' motivation decreases with the increase in their professional seniority. Similarly, in the research of Urhan (2018), it has been determined that the motivation of teachers with a seniority year of 5 or less is higher than those with a seniority year of 11-19 and 20 or more. However, the result of the present research is thought to be due to the fact that half of the participating teachers have been in the profession between 1-10 years and the distribution between groups is not balanced.

When the number of projects participated in professional life has been examined, it has been determined that there is no significant difference in the motivation levels of teachers who have not participate in any project, participated 1-2 times or participated 3 or more times. On the contrary, Schellenbach-Zell and Gräsel (2010) have concluded that teacher motivation is an important factor affecting participation in projects carried out within the scope of the innovative school. Similarly, Gorozidis, and Papaioannou (2014) have concluded that there is a significant relationship between autonomous motivation, a sub-dimension of motivation, and participation in projects. Teacher teams that organize local research projects in schools learn on their own and gain original experiences by working together, thanks to the motivation to seek new information, to work on problem-based school

development, to take into account problems, to produce solutions to problems (Iliya & Ifeoma, 2015). However, in the present research, it can be said that the fact that participating in the project in professional life do not create significant differences on motivation among the participants may be due to the fact that the groups regarding the number of participation in the project are close to each other. However, when the motivation averages between the groups has been examined, it has been determined that the teachers who participated in the project before is partially higher than those who never has participated. From this point of view, it is thought that the motivation levels of teachers may increase as they participate in projects in schools.

It has been also determined in the research that teachers' level of curriculum autonomy is high ($\bar{X}=3.82$). Considering the fact that the curriculum autonomy increases with the increase in the scores obtained from the Curriculum Autonomy Scale, this result can be accepted as high level. Similarly, Çolak and Altinkurt (2017) and Çolak et al. (2017) has found that teachers' autonomy behaviors are high in their studies. Different from the result obtained, it has been concluded in the research conducted by Yazıcı (2016) in the province of Muğla that the curriculum autonomy levels of teachers are at a medium level. In his research in Yolcu (2019), she has concluded that science teachers have curriculum autonomy above the intermediate level. Behrooz and Osam (2016), in their research on English teachers in Iran, have concluded that teachers' level of curriculum autonomy is low. Similarly, in the studies of Worth and Van den Brande (2020), teachers in England has reported that they have a low level of autonomy towards the curriculum content of the courses. The reasons for this differentiation among the research results; it can be interpreted as the result of the diversity of branches covered by the country, region and sample groups. In the study of Varatharaj, Abdullah, and İsmail (2015), it has stated that teachers' high curriculum autonomy enables them to make the teaching process more functional and convenient. In the same study, it has concluded that curriculum autonomy has positive effects on student learning, student autonomy and student performance.

In the research, it has been determined that teachers' curriculum autonomy levels do not differ significantly according to gender, educational status and professional seniority variables, but significantly differentiate according to the variable of the number of projects involved in professional life. Similarly, in the research of Behrooz and Osam (2016); it has been concluded that teachers' curriculum autonomy levels do not show a significant difference according to gender, seniority, educational status and professional seniority variables. Çolak et al. (2017) has concluded that the autonomy levels of the teachers do not differ significantly according to gender and seniority. Similarly, it has been concluded in Yazıcı's (2016) research, the autonomy levels of teachers do not differ significantly according to gender variable but according to the professional seniority variable, teachers who has worked for 10 years or less have a higher level of curriculum autonomy than those who has worked for more than 20 years. It can be said that this difference may be due to the tendency of teachers to take more initiative in the first years of the profession.

When the number of projects participated in professional life has been examined, it has been determined that the teachers who have participated in the project 1-2 times in professional life ($\bar{X}=3.79$) and 3 or more times ($\bar{X}=4.04$) have higher curriculum autonomy than those who have never participated in the project ($\bar{X}=3.62$). Based on these findings, it can be said that taking part in any project, regardless of whether it is regional, national or international, has an important effect on curriculum autonomy during the practice of the teaching profession. It can be thought that this result is due to teachers' ability to gain flexibility by determining all steps themselves during the creation, maintenance or finalization of projects. In a research, Yolcu (2019) has concluded that teachers' curriculum autonomy levels do not differ significantly according to the variable of participation in the project. In Yolcu's (2019) research, this variable has been categorized as participating or not participating in the project. In the present research, it is thought that the categorization of the number of participation in the project may be the reason for this differentiation. As a matter of fact, the high number of participations in the project indicates more experience in project processes. Thus, it can be said that a project-based teaching process can provide an environment that will allow the curriculum to be redesigned. As a matter of fact, Shome and Natarajan (2013) emphasize that project creation and implementation differentiates the concepts of learning and philosophical understanding of education for teachers. In this context, it can be stated that teachers can redesign their curriculum by reviewing them in the light of their experiences from projects.

Finally, a moderately positive and significant relationship has been determined between teachers' motivation and curriculum autonomy levels ($r=.324$, $p<.01$). In other words, it can be evaluated that the autonomy levels of the curriculum increases with the increase of the motivation of teachers, or on the contrary, their motivation increases with the increase in the level of curriculum autonomy. In addition, in the present research, it has been determined that the highest relationship between teachers' perceptions of curriculum autonomy levels is in the dimension of motivation identified with regulation. Similarly, Worth and Van den Brande (2020) has found a positive relationship between teachers' professional autonomy and motivation levels. In the same way, Wu (2015) has concluded that there is a high level of positive and significant relationship between teachers' motivation levels and teacher autonomy. In the same research, it has been concluded that teacher curriculum autonomy is a significant predictor of teacher motivation. Namunga (2017), on the other hand, has concluded in his research that there is a significant relationship between teachers' motivation and their way of implementing the curriculum. In the context of these results, it can be said that teachers with high motivation can behave more autonomously during the implementation of the curriculum.

In addition, it has been found that the highest relationship in the research is between the identified regulation sub-dimension of motivation and curriculum autonomy. In other words, it can be said that teachers can make an effort to make the current curriculum the most functional by defining

their profession as a sacred value. As a matter of fact, Çermik, Doğan and Şahin (2010) has concluded in their research that internal and altruistic reasons are more prominent in teachers' choice of profession. Similarly, Worth and Van den Brande (2020) stated in their research that teachers' professional autonomy is related to their intrinsic motivation. In this context, it is thought that the instructional innovations and practices that teachers will realize thanks to the autonomy of the curriculum, who are committed to providing benefit to the society, are an important way to achieve their goals. Another important finding of the research is that the external regulation dimension of teachers' motivation levels has no significant relationship with either curriculum autonomy or any of the dimensions of curriculum autonomy. In this context, it can be said that the motivation that teachers gain externally is not a determining factor on curriculum autonomy. Unlike Wu (2015), it has concluded that teacher curriculum autonomy is a significant predictor of teacher extrinsic motivation.

The reason for this difference can be interpreted as the change in external factors motivating the sample groups. In other words, these results can be interpreted as they can be effective in redesigning the curriculum by passing through various filters according to the type of extrinsic motivation elements. Based on these results obtained from the research, the following recommendations can be offered:

1. Qualitative research can be conducted that examine teacher motivation and curriculum autonomy in a more comprehensive and in-depth manner.
2. During the implementation of the curriculum, a trust-building administrator approach that will allow teachers to revise the curriculum can be adopted.
3. In the context of the research results, it can be ensured that teachers who prefer the profession for altruistic reasons are determined and appointed.
4. Teachers should be supported to produce projects and integrate the projects into the curriculum.

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