

Motivation and motivational factors of primary school teachers from the Self-Determination Theory perspective

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ABSTRACT This study examines the motivation of primary school teachers from the perspective of self-determination theory, to identify the variables and factors that affect motivation. The research was conducted using an explanatory mixed design. The qualitative data were collected from 414 teachers from 39 schools covering all districts of Erzurum province through the Multidimensional Job Motivation Scale. Qualitative data were collected from 30 participants through the Teacher Interview Form. Quantitative data were analyzed by t test, and ANOVA test; qualitative data were analyzed by content analysis. The results indicate that teachers' intrinsic motivation is higher than their extrinsic motivation. Moreover, teacher motivation varies in terms of gender, age, seniority year, class size, and settlement. More extrinsic motivation factors were found than intrinsic; the external factors are mostly negative, while internal factors are mostly positive. The most significant positive motivational factor is students, and the key factor decreasing motivation is class crowding. Future studies could collect more comprehensive results from a larger sample group that includes all types of schools.

Keywords: Primary school teacher, Self-determination theory, Teacher motivation

Öz-Belirleme Kuramı perspektifinden sınıf öğretmenlerinin motivasyonu ve motivasyon etkenleri

ÖZ Bu çalışmada sınıf öğretmenlerinin motivasyonunu öz-belirleme kuramı perspektifinden incelemek, motivasyona etki eden değişkenleri ve etkenleri belirlemek amaçlanmıştır. Araştırma karma yöntem desenlerinden açıklayıcı desenle yürütülmüştür. Araştırma Erzurum ilinin tüm ilçelerini kapsayan 39 okuldan 414 öğretmenle yürütülmüştür. Aynı grubun içinden 30 öğretmenle ise araştırmanın nitel boyutu yürütülmüştür. Veriler "Çok Boyutlu İş Motivasyonu Ölçeği" ve "Öğretmen Görüşme Formu" ile toplarılmıştır. Nicel veriler betimleyici istatistiksel teknikler, t testi, tek yönlü ANOVA testiyle; nitel veriler ise içerik analiziyle çözümlenmiştir. Sonuçlar, öğretmenlerin içsel motivasyon ortalamalarının dışsal motivasyondan yüksek olduğunu göstermiştir. Öğretmenlerin motivasyonunun cinsiyet, yaş, kidem yılı, sınıf mevcudu, yerleşim yeri değişkenleri açısından farklılığı gösterdiği belirlenmiştir. Ayrıca sonuçlar dışsal motivasyon etkenlerinin içsel motivasyon etkenlerinden fazla olduğunu; dışsal etkenlerin çoğunlukla olumsuz, içsel etkenlerin ise çoğunlukla olumlu etkenlerden oluştuğunu göstermiştir. Öğretmenlerin olumlu anlamda en büyük motivasyon etkeninin öğrenciler olduğu, motivasyonu düşüren en büyük etkenin ise sınıf kalabalıklığı olduğu ortaya konulmuştur. Gelecekte, farklı okul türlerinden öğretmenlerinden de dahil edildiği, daha büyük bir örneklemle daha kapsamlı sonuçlar elde edilebilir.

Anahtar Sözcükler: Öğretmen motivasyonu, Öz-belirleme kuramı, Sınıf öğretmeni

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INTRODUCTION

Teacher motivation is one of the key points of the education process. Understanding and developing this concept can increase the quality of education and reach targets more efficiently in line with the determined vision (Emiroğlu, 2017). For decades, many studies have been carried out to understand the place and importance of motivation in education, especially among teachers. A model, which was developed in the field of motivation, demonstrated the elements of students' motivation and emphasized three basic elements that are effective in motivation: teacher qualifications (e.g., a teacher's attitude or behavior), climate variables (e.g., a positive or negative class or climate), and teaching variables (Bacanlı, 2009). As can be seen, all three elements specified in the model are directly related to the teacher. Although teacher motivation is indispensable in achieving the goals determined in the educational process, it should not solely think directly related to students. Teacher motivation is also important for advancing education reforms. First, motivated teachers are more likely to work toward educational reforms and innovative legislation. Second, and more importantly, motivated teachers ensure that political reforms are implemented. Finally, teacher motivation is important for teacher satisfaction (De Jesus & Conboy, 2001). Karip (2017) stated that effective teaching depends on teachers' skills and motivation, which include their energy, excitement, and enthusiasm toward their work. A teacher's enthusiasm for teaching improves students' engagement, energy, and curiosity, and it increases not only the motivation of the teacher but also that of the students (Patrick et al., 2000). Keeping teacher motivation alive and decreasing the factors that lower it are the most important investments to be made in education in the long term.

Although teacher motivation has long been examined through the lenses of various frameworks, the most widely accepted is advanced by self-determination theory (SDT). In SDT, motivation is divided into two types, namely intrinsic and extrinsic, where participation to enjoy an activity is often considered to be intrinsically motivated (Rheinberg & Engeser, 2018). Intrinsic motivation thus refers to the pursuit of an activity because it is interesting or enjoyable (Mekler et al., 2017). On the other hand, extrinsic motivation derives from extrinsic rewards such as status, appreciation, or promotion (Deci, 1971). External motivators are external rewards that received outside of a job itself. Examples include retirement plans, health insurance, and permissions (Newstrom & Davis, 2002). In SDT, extrinsic motivation is examined across four sub-dimensions: external regulation, introjected regulation, identified regulation, and integrated regulation (Ryan & Deci, 2000). The theory also includes the dimension of amotivation. Constituting the third dimension of motivation, amotivation is an individual's lack of intention to develop behavior, lack of motivation, or inability to be motivated internally or externally (Ergin & Karataş, 2018). Amotivation may result from the belief that individuals' efforts are either inadequate or lack the desire or capacity to perform academically (Shen et al., 2010).

Many studies have dealt with motivation and other components of SDT. In many studies, basic psychological needs (autonomy, competence, and relatedness) and motivation dimensions in SDT are discussed. Research has demonstrated that teachers' support of students' basic psychological needs for autonomy, competence, and involvement facilitates students' self-determination in learning and academic performance (Niemiec & Ryan, 2009; Williams et al., 1999). Moreover, Ntoumanis and Standage (2009) have compiled studies on teachers' interpersonal style and their relationship with students' motivation, finding that intervention studies aimed to optimize teachers' interactions with students' basic psychological needs and motivational regulations predict various cognitive, affective, and behavioral outcomes in physical education. Some models with components of SDT have been tested in the literature. The tested models suggest that psychological needs relate to many variables. There are reciprocal influences between the variables of subjective wellbeing, satisfaction of needs, and autonomy support and intrinsic motivation (Cihangir Çankaya, 2005; Milyavskava & Koestner, 2011). Autonomous self-management perception is associated with parental perception and affective wellbeing (Kocayörük, 2012). Relationships also exist between contextual support, motivation, self-determination,

and need satisfaction; the theory of intrinsic-extrinsic motivation and lack of motivation is thereby supported (Chen & Jang, 2010). Students who perceive autonomy in a supportive environment experience higher levels of autonomy, competence, and self-determination, as well as stronger relationships, increasing self-determined motivation and positively predicting teachers' efforts and perseverance in physical education (Standage et al., 2006). A negative relationship exists between basic psychological needs and mathematics anxiety (Durmaz & Akkuş, 2016). Assessing studies on the motivational dimension of SDT, we found that studies examining motivation with respect to a lesson, subject area of study, or situation. Furthermore, Spittle et al. (2009) have discussed the reasons people choose physical education as a profession and their motivations for doing so. They found that factors such as self-confidence in interpersonal services are related to intrinsic motivation. They also determined that sports- and physical-activity-related motivations were extrinsic, and the selection of a course under the assumption it would be easy was related to lack of motivation.

Researchers have also examined factors affecting teacher motivation. The factors considered in these studies included the general climate of the school, class sizes, school resources and facilities, institutional activities, peer relations, the definition of the teacher's role, expectations of students, the leadership structure of the school, educational programming, time management, physical environment conditions, wages, rewards, incentives, job design, and performance management systems (Daniels, 2016; Dörnyei & Ushioda, 2013; Rasheed et al., 2016). Whatley (1998) has determined the factors relating to teachers' motivations to choose their profession, reporting the most important of these as the desire and love working with students. Thus, teachers' motivational factors consist mostly of extrinsic factors.

Many studies in the literature examine SDT components and the theory's motivation dimensions. In most studies, intrinsic and extrinsic motivation have been addressed, but motivational regulations were not mentioned. In addition, most studies on this subject have been completed with a quantitative or qualitative design. However, it is important to examine teacher motivation more deeply. This mixed-methods study therefore blends quantitative and qualitative results. Moreover, studies dealing with the motivation of teachers in a particular branch in a multidimensional way are relatively limited. The study is unique in that it describes teacher motivation and examines deeply the variables of influence. In this respect, the research attempts to bring new insight to the literature.

Purpose of the Study

This study examines what influences primary school teachers' motivations within the framework of SDT. It also analyzes the internal and external factors affecting teacher motivation. For these purposes, answers to the following questions are sought:

- 1) What is the motivation level of primary school teachers?
- 2) Do the motivations of primary school teachers differ by gender, age, seniority year, place of duty, and class size?
- 3) What internal and external factors affect the motivation of primary school teachers?

METHOD

This research was conducted using an explanatory design, which is one of the mixed method designs. In the descriptive design, quantitative research is carried out first, followed by qualitative research. The main purpose is to explain the findings obtained through quantitative research by examining them in depth with qualitative research techniques (Creswell & Plano-Clark, 2017). The basic idea of this design is to establish the qualitative data collection process directly on quantitative findings (Fraenkel, Wallen, & Hyun, 2012).

Participants

The quantitative data were obtained from 414 primary school teachers in 39 primary schools that were determined to cover all districts of Erzurum province. Scale forms belonging to eight people were excluded from the study based on an extreme value analysis performed before answering the research questions. Therefore, all quantitative analyses were conducted with 406 people. There were 233 women and 173 men. The mean age of the sample was 35.65 ($SD=9.14$) and mean seniority year was 12.29 ($SD=8.39$).

The qualitative data were collected from the same teachers from whom the quantitative data were collected, with 30 teachers. The teachers interviewed work in 10 different schools; six are in the city center, while one is in the district center, and three are in the village and they consist of the same number of individuals ($n=15$) of both sexes.

Data Collection Tools

The tools used in obtaining the quantitative and qualitative data were the Personal Information form, the Multidimensional Work Motivation Scale (MWMS) and the Teacher interview form.

Personal information form

Personal information form was applied, along with the MWMS. In the form, both scales and the purpose of applying them were explained, and information about the teachers was obtained through the form. Apart from the explanation, the form had seven questions, and teachers were asked about their gender, age, years of professional seniority, educational status, student numbers, and the class levels they teach.

Multidimensional work motivation scale

Multidimensional work motivation scale was developed by Gagné et al. (2010), and adapted to Turkish culture by Çivilidağ and Şekercioğlu (2017). It consists of 18 items and six sub-dimensions. There are three items in each dimension, and the sub-dimensions are “identified regulation,” “external regulation—material,” “external regulation—social,” “amotivation,” “introjected regulation,” and “intrinsic motivation.” These dimensions were formed according to the motivational regulations in SDT. In the original scale, external regulation consists of two separate subscales: 1) material and social rewards and 2) punishments (Gagné et al, 2010). The brief structure and sample items of these subscales are presented below:

- Amotivation (m1): “I don't put any effort into my job because I think I'm wasting my time.”
- Extrinsic regulation—material (m13): “But if I put enough effort in my job, others (employer, supervisor, etc.) will reward me economically.”
- Extrinsic regulation—social (m7): “I make an effort in my job to get the approval of others (supervisor, colleague, family, etc.).”
- Introjected regulation (m14): “I make an effort at my job otherwise I will feel bad.”
- Identified regulation (m12): “I make an effort in my job because I think it's personally important to put effort into this job.”
- Intrinsic motivation (m2): “I put effort into my job because it is interesting.”

These six dimensions of the scale constitute all dimensions in SDT, and they were used to determine teachers' motivation sub scores in the study. The reliability analysis values were as follows: .70 for amotivation, .65 for intrinsic motivation, .83 for extrinsic regulation—social, .62 for identified regulation, .70 for extrinsic regulation—material, .61 for introjected regulation and .66 for job motivation (general mean). These values of the scale are above .70 in a significant part of the dimensions. The low values in some dimensions may be due to the low number of items in the dimensions. In general, a small number of items constitute a factor that reduces reliability due to validity

of a research (Çivilidağ & Şekercioğlu, 2017). The 18-item and 6-dimensional structure of the scale was verified by confirmatory factor analysis for the scale form. The fit indices obtained in the CFA results showed that the scale was compatible with the data for the current sample ($CMIN/DF = 2,30$; $TLI = .92$; $CFI = .93$; $SRMR = .05$; $RMSEA = .05$).

Teacher interview form

The interview with the teachers was conducted to support the quantitative data obtained from the motivation scale, to make more detailed inferences about the quantitative data and to detail the results obtained from the quantitative data. An interview is a technique that provides the opportunity to communicate between people through a form related to a specific field and within the framework of a goal (Anderson & Arsenault, 2004). An unstructured interview form was used in the study. Unstructured interviewing is a form of communication that takes place naturally without any negotiation agreement within the natural flow of verbal interaction with a person (Gall et al., 1996). Therefore, depending on the responses of the interviewees, it was necessary to restructure the process and prepare new questions in response to each response. The unstructured interview form consists of three questions developed by taking expert opinions and piloting. These questions are:

- (1) What are the situations that energize and motivate you while starting your job? Explain.
- (2) What are the situations that adversely affect your energy, upset your mood, and upset you while you start doing your job? Explain.
- (3) What results from your job have a positive or negative effect on you? Explain.

In the process of developing this form, firstly the information obtained from the quantitative dimension was taken into consideration, and the structure and characteristics of motivation, the concept studied, were examined. Expert opinions were consulted while creating the questions and an expert language check was carried out. In this context, opinions were received from three field experts who worked in this field in the faculty of education (two from primary education department, one from guidance and psychological counseling department). An expert from the Turkish education department was consulted for language checkout. In this way, the expressions of the questions were corrected and made more understandable. A pilot application of the draft form was conducted to confirm whether the interviewees found the questions understandable and whether the answers were appropriate for the subject area.

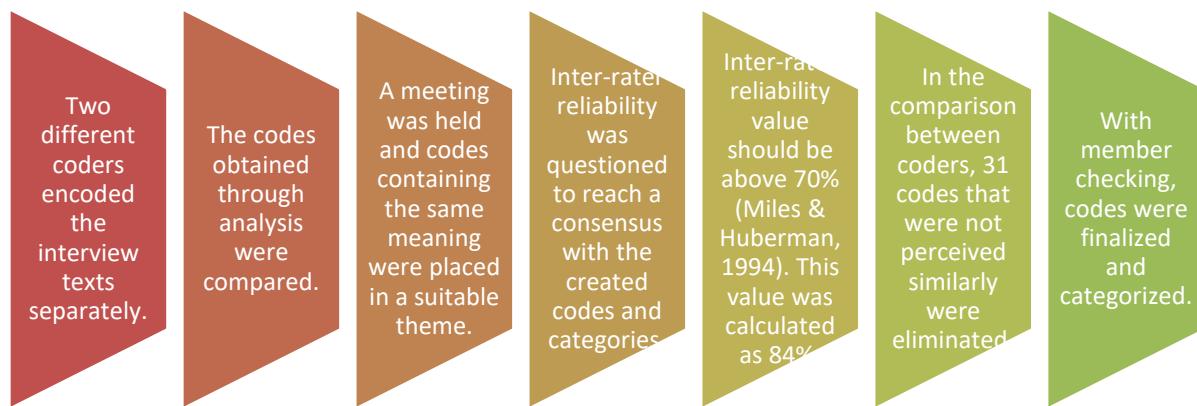
Data Analysis

The data were analyzed descriptively and it was checked whether there were erroneous data. Afterwards, missing data (0.2%) was automatically completed by performing lost data analysis (series mean). Later, Mahalanobis extreme value analysis was performed and 8 people were excluded from the study. This analysis should be consulted to test normality assumptions in multivariate analysis. Afterwards, normality and homogeneity analyzes were made. In this context, Kolmogorov Smirnov test was performed; mode, median, and mean values were examined; kurtosis and skewness values were checked, q-q plot and histogram graphics were examined. It was determined that data were normally distributed. Finally, CFA was made and Cronbach Alpha internal consistency values were calculated.

Regarding the research questions, first, the motivation level of teachers was determined by using descriptive statistical techniques. In this way, the first research question was answered. To answer the second question of the study, an independent sample t test was performed to compare variables in the two categories, and a one-way analysis of variance was performed to compare variables in more than two categories. Regarding the differentiations that emerged in ANOVA tests, post hoc tests were used. In this context, in comparing groups with equal or close sample numbers for groups that are homogeneous, if there is little difference between the sample sizes of the groups, Gabriel test; If there are too many differences, Hochberg's GT2 test was made. The Games Howell test was conducted for groups whose variances were not homogeneous. (Field, 2013).

Content analysis was conducted to answer the qualitative questions of the research. According to Cohen, Manion, & Morrison (2007), content analysis consists of organizing, summarizing, comparing, and interpreting texts; it is a repeatable, observable, systematic research technique based on a certain rule. The texts were analyzed with content analysis by two coders with the help of NVivo 12 program. This process has been completed in the order in Figure 1.

Figure 1.
Qualitative Data Analysis Process



Procedure

In this study, quantitative data were collected to determine the motivation levels of primary school teachers. Then, based on the findings, qualitative data were collected to support the quantitative data and to explain a number of situations. Quantitative data were thus the focus of our study, while qualitative data were used as supportive or explanatory data. In the study, comprehensive results were tried to be obtained by combining these two data. In the quantitative data collection and analysis process, firstly, the sample group was determined and official permissions were obtained for implementation. Teachers were selected using the random cluster sampling method (Fraenkel et al., 2012). Cluster sampling uses random sampling to select specific clusters or groups instead of individuals or items. In each of the clusters, all people are included in the sampling. The advantage of this sampling technique is that clusters, as the name suggests, normally contain elements that are grouped close to one another in a place or a geographic area (Denscombe, 2010). The application was conducted face to face through printed forms. 414 out of 513 teachers in the designated schools were implemented. The forms obtained were first filed in the Excel program and then transferred to the SPSS 25 program. Data were analyzed and the results were summarized.

Qualitative data were obtained from 30 teachers from the same group, determined to reflect the first group. The teachers determined by maximum variation sampling (Büyüköztürk et al., 2016). In maximum variation, the sampling includes individuals who have different views on the subject under study or represent the widest possible range of traits studied (Lodico et al., 2006). Before the meeting, permissions were obtained and a time was determined for the interviews with the teachers. The interviews were recorded with a tape recorder. The interviews were completed in a formal but sincere atmosphere in schools or similar settings. Probes were used to obtain in-depth information. After the interviews were completed, the audio recordings were transcribed and converted to text. After all these processes were completed, quantitative and qualitative data were presented separately and combined in the discussion section. What these two data mean together, which quantitative data were explained and supported were also revealed. The explanation regarding the ethics committee approval document is stated in the title "Acknowledgement".

Validity and Reliability

The following measures have been taken in the process of collecting and analyzing quantitative data. Piloting the implementation of quantitative measurement tools (Van Teijlingen & Hundley, 2010); utilizing Cronbach's alpha coefficient for reliability and confirmatory factor analysis for validity (Özdamar, 2017); analyzing lost data (McKnight et al., 2007); performing Mahalanobis extreme value analysis (Hodge & Austin, 2004).

Furthermore, for the validity and reliability of qualitative data, following measures have been taken. Determining the sample group by purposive sampling (Başkale, 2016); presenting the obtained data with a descriptive approach and enriching the data with direct quotations (LeCompte & Goetz, 1982); coding and comparing interview texts by two different coders (Miles & Huberman, 1994); creating a member checking (Başkale, 2016). In this study, after comparing the coders and finalizing the codes, the participants were confirmed at 20% ($n=6$), and the codes were expressed more accurately with the feedback received; Analyzing of data according to a predefined conceptual framework (Lecompte & Goetz, 1982); prolonged engagement (Başkale, 2016); clearly identifying the people who are data sources (Lecompte & Goetz, 1982); filing referential adequacy materials (Guba & Lincoln, 1982).

FINDINGS

The findings of the research are presented to answer the research questions.

Teachers' Motivation Levels

It was aimed to determine the average level of teacher motivation scores in terms of dimensions. Descriptive statistics (mean values and standard deviations) for teachers' motivation is presented in the Table 1.

Table 1.
Motivation Score Averages of Teachers

Motivation Dimension	Mean	S. Dev.
Intrinsic motivation	4.79	1.36
Extrinsic Regulation – Social (S)	1.99	1.24
Identified Regulation	6.06	1.03
Extrinsic Regulation – Material (M)	2.24	1.21
Introjected Regulation	5.89	1.06
Amotivation	1.32	.71

As Table 1 indicates, the dimension with the highest average is the identified regulation dimension ($M=6.06$, $sd=1.03$). It is seen that the dimension with the lowest average is not being motivated ($M=1.32$, $sd=.71$). It is observed that the motivation scores of the teachers are relatively low in the amotivation, external regulation-social and external regulation-material dimensions, while it is high in the dimensions of intrinsic motivation, identified regulation and introjected regulation.

Examining Teachers' Motivation in Terms of Variables

In the study, it was examined whether the motivation of teachers differs in terms of gender, age, professional seniority of teachers and class size of their class. The results of the independent samples t test conducted to determine whether the motivation scores of the teachers differ according to gender are given in Table 2.

Table 2.
Comparison of Teachers' Motivation Scores by Gender

Dimension	Gender	n	M	Ss	T	Sd	p
Intrinsic motivation	Female	233	4.84	1.33	-.765	404	.445
	Male	173	4.73	1.40			
Extrinsic Regulation (S)	Female	233	1.91	1.19	-1.51	404	.131
	Male	173	2.10	1.30			
Identified Regulation	Female	233	6.19	.95	2.82	404	.005
	Male	173	5.90	1.11			
Extrinsic Regulation (M)	Female	233	2.13	1.15	-1.97	404	.049
	Male	173	2.37	1.33			
Introjected Regulation	Female	233	5.93	1.40	.945	404	.345
	Male	173	5.83	1.19			
Amotivation	Female	233	1.21	.56	-.609	404	.000
	Male	173	1.48	.85			

As Table 2 indicates, the motivation scores of teachers differ significantly in terms of gender in the sub-dimensions of identified regulation [$t(404) = 2.82$; $p < .05$] in favor of female teachers; external regulation-material [$t(404) = -1.97$; $p < .05$] in favor of male teachers, and amotivation [$t(404) = -.609$; $p < .05$] in favor of male teachers. Teachers' motivation was also compared by age. In terms of age, it is divided into four groups: 21-29 years old, 30-35 years old, 36-44 years old, and 45 and over. The results of ANOVA analysis regarding the comparison of teachers' motivation by age are given in Table 3.

Table 3.
Comparison of Teachers' Motivation Scores by Age

Variable		S.S.	Df	M.S.	F	p	Post hoc
Intrinsic motivation	Between Groups	16.23	3	5.412	2.93	.033	21-29>30-35
	Within Groups	740.95	402	1.843			
	Total	757.19	405				
Extrinsic Regulation (S)	Between Groups	12.83	3	4.278	2.79	.040	Meaningless
	Within Groups	615.25	402	1.530			
	Total	628.08	405				
Identified Regulation	Between Groups	2.23	3	.743	.687	.560	Meaningless
	Within Groups	434.69	402	1.081			
	Total	436.92	405				
Extrinsic Regulation (M)	Between Groups	12.65	3	4.218	2.87	.036	Meaningless
	Within Groups	589.91	402	1.467			
	Total	602.57	405				
Introjected Regulation	Between Groups	2.546	3	.849	.752	.522	Meaningless
	Within Groups	453.58	402	1.128			
	Total	456.13	405				
Amotivation	Between Groups	8.35	3	2.784	8.07	.259	Meaningless
	Within Groups	171.31	497	0.345			
	Total	179.66	500				

As Table 3 indicates, teachers' motivation scores differ significantly in terms of age variable in the intrinsic motivation ($F_{3, 402} = 2.93$; $p < .05$); external regulation-social ($F_{3, 402} = 2.79$; $p < .05$), and external regulation-material ($F_{3, 402} = 2.87$; $p < .05$). Post hoc test made for external regulation-social and material, the differences between the groups were not significant. Teachers' motivation was also compared in terms of years of seniority. In terms of seniority years, five groups were formed: 1-5 years, 6-10 years, 11-15 years, 16-20 years, 20 years and above. Results of one-way ANOVA regarding the comparison of the motivation of teachers according to seniority year variable are given in Table 4.

Table 4.

Comparison of Teachers' Motivation Scores by Professional Seniority

Variable		S.S.	Df	M.S.	F	p	Post hoc
Intrinsic motivation	Between Groups	20.51	4	5.128	2.79	.026	1-5 year > 6-10 years
	Within Groups	736.67	401	1.837			
	Total	757.19	405				
Extrinsic Regulation (S)	Between Groups	8.404	4	2.101	1.36	.247	Meaningless
	Within Groups	619.68	401	1.545			
	Total	628.08	405				
Identified Regulation	Between Groups	1.446	4	.362	.333	.856	Meaningless
	Within Groups	435.47	401	1.086			
	Total	436.92	405				
Extrinsic Regulation (M)	Between Groups	17.32	4	4.332	2.96	.019	1-5 years > 21 years+
	Within Groups	585.24	401	1.459			
	Total	602.57	405				
Introjected Regulation	Between Groups	2.865	4	.716	.634	.639	Meaningless
	Within Groups	453.27	401	1.130			
	Total	456.13	405				
Amotivation	Between Groups	3.298	4	.825	1.63	.165	Meaningless
	Within Groups	202.53	401	.505			
	Total	205.83	405				

As Table 4 indicates, teachers' motivation differs significantly in terms of professional seniority in the intrinsic motivation ($F_{4,401} = 2.79; p < .05$) and external regulation-material ($F_{4,401} = 2.96; p < .05$). Post hoc test shows that the intrinsic motivation of teachers with a seniority of 1-5 years is higher than those have 6-10 years, and in the external regulation-material, teachers with a seniority of 1-5 years have higher motivation than those have 21 years or more. Teachers' motivation was also compared by class size. In terms of class size, they are divided into five groups: between 7-15, between 16-20, between 21-25, between 26-35, 36 and more. The results of ANOVA analysis regarding the comparison of teachers' motivation by class size variable are given in Table 5.

Table 5.

Comparison of Teachers' Motivation Scores by Class Size

Variable		S.S.	df	M.S.	F	p	Post hoc
Intrinsic motivation	Between Groups	19.21	4	4.80	2.610	.035	Meaningless
	Within Groups	737.97	401	1.84			
	Total	757.19	405				
Extrinsic Regulation (S)	Between Groups	3.621	4	.905	.581	.676	Meaningless
	Within Groups	624.46	401	1.55			
	Total	628.08	405				
Identified Regulation	Between Groups	5.931	4	1.48	1.380	.240	Meaningless
	Within Groups	430.99	401	1.07			
	Total	436.92	405				
Extrinsic Regulation (M)	Between Groups	4.374	4	1.09	.733	.570	Meaningless
	Within Groups	598.19	401	1.49			
	Total	602.57	405				
Introjected Regulation	Between Groups	7.668	4	1.91	1.714	.146	Meaningless
	Within Groups	448.46	401	1.11			
	Total	456.13	405				
Amotivation	Between Groups	.012	4	.003	.006	1.00	Meaningless
	Within Groups	205.82	401	.513			
	Total	205.83	405				

As Table 5 indicates, the intrinsic motivation scores of teachers differ in terms of the class size variable ($F_{4,401} = 2.61; p > .05$). Since there was no significant differentiation in terms of intrinsic motivation in the post hoc analysis, the result in the ANOVA analysis was deemed to be meaningless. However, when the mean for the significance value in intrinsic motivation revealed in the ANOVA test is examined, it can be said that the average of teachers with 21-25 students is significantly different from those with 36

or more students. Teachers' motivation scores were also compared according to the place of residence of the school where the teachers work. Teachers are divided into three groups in terms of the location where their schools are located: city center, district center, village and town employees. One-way ANOVA results for comparison of teachers' motivation sub-dimension scores in terms of settlement variable are given in Table 6.

Table 6.

Comparison of Teachers' Motivation Scores by Settlement Where The School Is Located

Variable		S.S	df	M.S.	F	p	Post hoc
Intrinsic motivation	Between Groups	9.359	2	4.679	2.52	.082	Meaningless
	Within Groups	747.83	403	1.856			
	Total	757.19	405				
Extrinsic Regulation (S)	Between Groups	4.906	2	2.453	1.58	.206	Meaningless
	Within Groups	623.17	403	1.546			
	Total	628.08	405				
Identified Regulation	Between Groups	.910	2	.455	.421	.657	Meaningless
	Within Groups	436.01	403	1.082			
	Total	436.92	405				
Extrinsic Regulation (M)	Between Groups	7.082	2	3.541	2.39	.092	Meaningless
	Within Groups	595.48	403	1.478			
	Total	602.57	405				
Introjected Regulation	Between Groups	.399	2	.199	.176	.838	Meaningless
	Within Groups	455.73	403	1.131			
	Total	456.13	405				
Amotivation	Between Groups	2.388	2	1.194	2.36	.095	Meaningless
	Within Groups	203.44	403	.505			
	Total	205.83	405				

As Table 6 indicates, dimensions of teachers' intrinsic motivation ($F_{2,403} = 2.52; p > .05$); extrinsic regulation-social ($F_{2,403} = 1.58; p > .05$); identified regulation ($F_{2,403} = .421; p > .05$); external regulation-material ($F_{2,403} = 2.39; p > .05$); introjected regulation ($F_{2,403} = .176; p > .05$); and amotivation ($F_{2,403} = 2.36; p > .05$) don't differ according to settlement variable.

Motivational Factors of Teachers

Teachers' opinions about the factors affecting their motivation positively and negatively were analyzed through content analysis. These factors, as specified by teachers, were determined and listed. The distribution of teachers' intrinsic and extrinsic motivational factors is presented in Table 7.

Table 7.

Distribution of Motivational Factors Stated by Teachers

Motivation Type	Number of Views	Code Number
Intrinsic Motivation	37	13
Extrinsic Motivation	265	85
Total	302	98

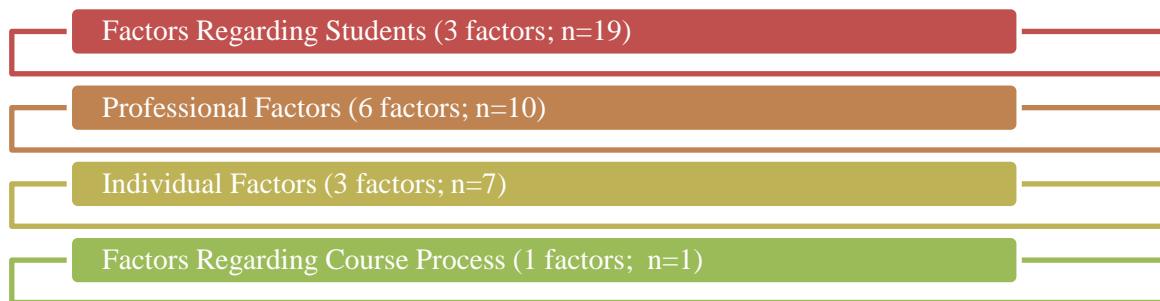
As Table 7 indicates, teachers were found to have 13 different intrinsic motivational factors and 85 different extrinsic motivational factors. The number of external factors is considerably greater than the number of internal factors.

Intrinsic motivational factors

Teachers mentioned 13 different intrinsic motivational factors 37 times. Ten of these increased motivation ($n=34$), while three decreased it ($n=3$). The most frequently expressed intrinsic motivational factor was "the desire to prepare students for the future" ($n=9$). Figure 2 categorizes these teachers' intrinsic motivational factors and the number of views and codes in each category.

Figure 2.

Intrinsic Motivational Factors of Teachers



Factors regarding students

Teachers frequently expressed “the desire to prepare students for the future.” Teachers mentioned this desire in various ways.:

T7: “Every time we enter the class, we teach students as if we were dealing with our future. We treat them as if we are facing future of our country. This also motivates us.”

T11: “The fact that they will be adults who will build our future reminds me that I always have to do my job well.”

Another factor frequently mentioned was “student love.”

T3: “Honestly, because I love children, because I feel the brightness in their eyes, it will be an idealistic sentence, but it is what motivates me the most.”

Another desire teachers identified was “to be useful to the students.”

T9: “I can say that it is the motive to be useful to students, to provide them with something, to make an impact on their lives.”

Occupational factors

A frequently noted factor regarding their profession was “doing your job willingly.” T27: “I also love my job, which is one of its plus positive advantages for me.”

In addition to loving the teaching profession, the general view of “liking to work” was expressed.

T27: “Teaching has a different pleasure. But it is a very nice feeling to work at first.”

One of the sources of motivation mentioned was “to love to teach.”

T21: “Besides, my love to teach motivates me ...”

Factors related to the course process

The factors expressed by the teachers regarding the classroom teaching process were rarely mentioned ($n=1$). One of these factors is coming unprepared for the lesson.

T18: “My being unprepared for the lesson is also a negative factor.”

Individual-emotional factors

One of the factors teachers expressed about their individual, emotional, and spiritual motivation is the love of the country (homeland).

T6: "Besides, I was very motivated to think how beneficial individuals these students will be to our society and nation in the future, and to develop positive thoughts about this."

Another factor noted by the teachers was "desire to improve oneself."

T30: "I think personal development is also very important. The more I develop myself, the more I do research about education and the school, and the more I learn different methods, the more I want to teach and the better I get motivated."

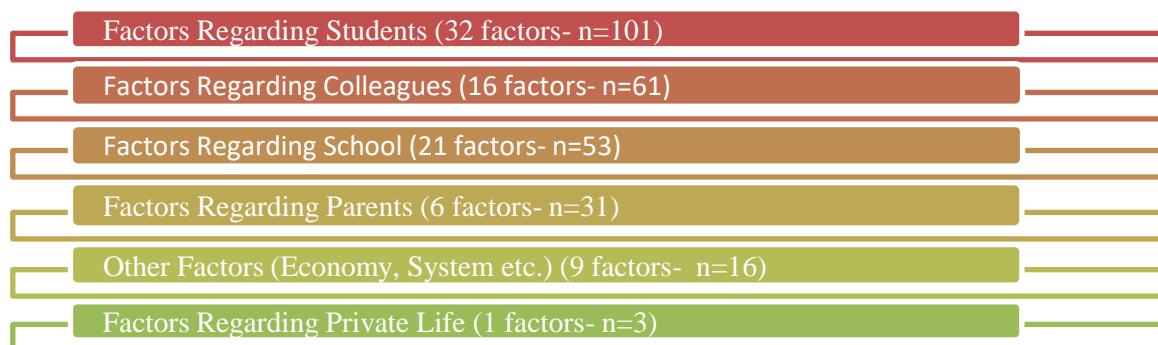
Teachers further mentioned "the obligation to teach conscientiously."

T21: "My conscience motivates and energizes the necessity to teach the children entrusted to me."

Extrinsic motivational factors

Teachers mentioned 85 different extrinsic motivational factors. Forty of these factors are positive ($n=130$), and 45 negative ($n=135$). These factors can be listed in six categories. These categories and the number of views and codes in each category can be seen in Figure 3.

Figure 3.
Extrinsic Motivational Factors of Teachers



Factors regarding students

A significant portion of teachers' extrinsic motivational factors was related to students. In this regard, "teaching something new to students" ($n=18$), "seeing the development of students" ($n=7$), "having students' wishes and needs" ($n=7$), "students' smiles on their faces" ($n=4$), "students expressing that they are happy" ($n=3$) and "success in exams (trial etc.)" ($n=3$) are frequently mentioned positive factors.

T24: "... There is no motivation other than the happiness of teaching them something."

T16: "Having students' demands and needs affects me positively. I'm trying to meet their expectations."
T15: "First of all, it motivates me when children look at me with smiling eyes."

Apart from these factors, negative factors related to students were also mentioned. Among the physical factors in this regard, "crowded classroom" ($n=19$), "crowded school" ($n=5$) and "negative behaviors of students" ($n=3$) are frequently mentioned. Class crowd is particularly striking as the most frequently mentioned negative factor. The opinions of the teacher T11 regarding minimum class size (7 students)

and teacher T14 with regard to the maximum class size (48 students) and one another view that supports them (T8) should be discussed.

T11: "There are 4 second grade students, 2 third grade and 2 fourth grade students in my class. One of the annoying reasons is that I don't have enough students for the activity I am planning. This could be a negatively influencing factor."

T14: "Of course, the crowd of the class is important. Are 25 students, and 48 students the same thing? Imagine that I spend so much energy here that I cannot spare time for my own children at home."

T8: "I think that the ideal class size should be between 20 and 25 in order to give the students the right to speak in terms of exchanging ideas and to carry out activities easily."

Regarding the crowded schools, the teachers stated that besides the classroom crowd, there were too many classrooms and too many teachers.

T28: "First of all, I am currently in a very crowded school. This lowers my motivation. It exploits my energy."

The negative behaviors of students were another frequently mentioned external factor regarding students.

T17: "It is also a negative situation for students to lose respect towards their teachers."

Apart from these factors, teachers specified achieving positive success, inability to change the branch, feeling the love of the students, seeing the light in the students, the high level of readiness of the students, the positive approach of the students, doing social activities with the students, and seeing the positive feelings of the students ($n=2$). They least frequently mentioned following factors: "positive behaviors of students, sharing something with the teacher, visiting-calling former students, seeing students' positive feelings, and receiving positive feedback from students" ($n=1$). Negative factors for students included their lack of interest and development ($n=2$). In addition, teachers least frequently opined concerning students not doing homework, mainstreaming students in the class, students' parents doing their homework, low class sizes, unhappy students, students who have family problems, and students coming unprepared for lessons ($n=1$).

Factors regarding colleagues

An another extrinsic factor motivating teachers related to their colleagues (teachers, school administration, etc.). They identified "positive relations with colleagues" ($n=13$), "positive relations with school administrators" ($n=8$), "cooperation and cooperation with colleagues" ($n=3$), "colleagues giving new ideas" ($n=3$), positive factors such as "chatting with colleagues" ($n=3$), and "appreciation of school administrators" ($n=3$).

T22: "I can also say that the harmony between the teachers at the school I work in, and the harmony between the administrator and the teachers gives me energy and increases my motivation."

T4: "The talks we have with our colleagues, whether they are about education or other topics, attract me to school."

In addition, two factors were frequently mentioned: "negative attitudes of school administrators" ($n=13$) and "negativities with colleagues" ($n=6$).

T19: "Managers can have negative attitudes. These can sometimes cause us not to want to be in the job environment."

T15: "Sometimes the negative behaviors of my colleagues can have negative effects on me."

Apart from these factors, the factors such as positive appreciation of success by colleagues, positive communication among school stakeholders, happiness of colleagues ($n=1$) were mentioned least frequently. In addition, negatively, incompatibility among teachers ($n=2$), the high number of teachers, not having a friend to spend time with, ineffectiveness of the school management and unable to find support when making a mistake ($n=1$) were expressed least frequently.

Factors regarding school

Another extrinsic motivation factors of teachers were related to school. Only one factor is frequently identified: “The physical conditions of the school are suitable” ($n=13$).

T13: “The physical conditions of our school, such as being heated in terms of heating, paint, being clean, having staff in the school, cleaning works and burning the heaters affects us.”

Negative factors were also mentioned among those related to the school: for example, “unsuitable physical conditions of the school” ($n=7$), “lack of educational environment at school (gym, laboratory etc.)” ($n=7$), “school being far from home” ($n=4$), and “extra work” ($n=3$).

T23: “I can say that the physical and psychological conditions are not appropriate. This reduces my energy.”

T12: “We cannot use the laboratory in a science lesson. We don’t have a music class. Since these are not available, we are also affected by the physical environment.”

Apart from these factors, “digital infrastructure in the school, efficient usage of time, cooperation with different scholastic institutions, and social activities outside of school ($n=1$) were mentioned least frequently. Negatively, factors such as the absence of resting areas at the school, working hours, and noise at the school ($n=2$) were expressed. In addition, the injustice in the school, the daily workload, the number of daily lessons, the absence of free lesson days, the inadequacy of the materials in the school, the lack of time off in school, the inability to concentrate on a class, the lack of infrastructure in schools, and the development of materials ($n=1$) were noted.

Factors regarding parents

Some of the teachers’ extrinsic motivational factors also related to parents. In addition to the positive factor of “positive attitudes of parents” ($n=8$), factors such as “negative attitudes of parents” ($n=10$), “parents’ indifference” ($n=6$), and “parents’ interventions” ($n=3$) were identified.

T10: “Parents are respectful. As a teacher, when I suggest something useful for their children, they don’t reject many things.”

T17: “I can say that parents are also an important factor. Parents who are constantly trying to intervene in our work can make us upset.”

Apart from these factors, teachers negatively reported the “low education level of parents” ($n=2$) and positively reported “positive feedback from parents” ($n=2$).

Factors regarding private life

Again, the extrinsic motivational factor noted at a certain frequency was “factors related to private life” ($n=3$).

T30: “Our private life also affects. How happy a teacher is in his private life and how good he is in his own life is reflected in this school. If he is not happy, his motivation may decrease.”

Other factors

Another notable concern comprised “economic factors” ($n=5$).

T7: “Of course, our economic problem, the current problem of all teachers ... Economically, for example, the teacher should not think about debt when he / she attends the class.”

A second addition is “education system and approach” ($n=2$).

T4: “I don’t think the country’s education policies are very good. Our new minister has good ideas. But there is an infrastructure problem in education. These have to be fixed. These also affect negatively.”

Further, the factor of climatic conditions ($n=3$) was raised.

T25: “My classroom door is close to the exit door. We are in a city where the winter is cold. We work with our reefer jackets on winter days. These are definitely negative factors.”

Valuing the teacher, effective usage of time, cooperation with different schools-institutions, continuous change of assignment, lack of promotion chance, not being able to receive postgraduate education were the factors identified the least frequently ($n=1$).

DISCUSSION AND CONCLUSION

In the quantitative dimension of the study, the averages of the teachers’ motivation sub-dimension scores were obtained. Notably, significant differences arose between dimensions, and those with the highest averages in the research were identified as regulation, introjected regulation, and intrinsic motivation. The average of the four dimensions of extrinsic motivation was lower than that of intrinsic motivation. Furthermore, the mean values of external regulation and amotivation were low, especially in terms of autonomy. Therefore, teachers have a high level of autonomy. The literature variously contains findings of teachers’ intrinsic motivation being higher than their extrinsic motivation (Demir, 2011; Ertürk, 2016; Yasmeen et al., 2019). The result obtained from the research is desirable because even though both types of motivation are important in teaching, intrinsic motivation is seen as more important. What is desired is for teachers to be motivated internally. Studies have determined that individuals with high intrinsic motivation are more successful than those with higher extrinsic motivation (Yazıcı, 2009). Moreover, studies have revealed that intrinsic motivation also relates to job satisfaction (Masvaure & Maharaj, 2014; Rasool et al., 2017). An important source in the field states that the lack of intrinsic motivation leads to impactful results (Csikszentmihalyi, 2014). In addition, it has been determined that teachers’ intrinsic motivation influences students’ intrinsic motivation (Lam et al., 2009). Therefore, that teachers are close to the desired level in terms of motivation.

Another result obtained from the qualitative data is the variables that affect teachers’ motivation. The result regarding gender indicates that female teachers are closer to intrinsic motivation; that is, they demonstrate more autonomy and more motivation than their male counterparts. These results show that gender is a factor affecting motivation. Uçar and İpek (2019) found that the extrinsic motivation of female teachers was higher than that of males, while in Ertürk’s (2016) study, male teachers had higher internal motivation than women. The different results in the literature and in this study may have resulted from differences in other demographic qualities of teachers. Results related to age and professional seniority revealed that young teachers have more intrinsic motivation. The study of Ertürk (2016), contrary to this result, determined that older and more senior teachers had higher intrinsic and extrinsic motivation. Contrary to our and Ertürk’s (2016) research, Uçar and İpek (2019) found that the number of years of professional seniority does not correlate with intrinsic and extrinsic motivation. Given that

these studies were conducted on high school samples, it is possible to obtain different results. In our study, a significant difference appeared between the groups in terms of class size in intrinsic motivation dimension. Although this difference was not significant in favor of a particular group in the post hoc test, examination of the average differences showed that teachers with an average class size were more motivated than were those working in crowded classrooms. In addition, class size was the most frequently identified negative extrinsic factor derived from the statements obtained in the qualitative dimension of the study.

In the qualitative dimension of the research, the results obtained from the interviews regarding motivation support the quantitative results. Teachers' intrinsic motivational factors consisted of fewer but positive factors, while their external motivational factors consisted of many, but mostly negative factors. Thus, intrinsic motivation was higher than extrinsic motivation. Ada et al. (2013) have similarly determined that motivational factors were mostly external; however, most of the internal factors were positive, and the majority of external factors were negative. Unexpectedly, motivational factors in the school environment are mostly composed of external factors. Schools are institutions diverse in both environments and stakeholders. Teachers who are at the center of this diversity are expected to have more external factors.

In our study, the factors expressed regarding intrinsic motivation related mostly to students. The factors related to profession, lesson process, and individual factors. Factors included the desire to prepare students for the future, loving students, and the desire to be useful to students. Therefore, students are the most important source of intrinsic motivation for teachers. Ada et al. (2013) similarly stated that internal factors are often related to students. Apart from these factors, other factors related to the profession, those related to the course process, and individual factors stand out as internal factors. Similar factors have been mentioned in many studies in the literature. In these studies, the following factors were identified: "personal or social factors, the classroom environment, socioeconomic status, students' behavior, exam stress, rewards or incentives, and self-confidence or the teacher's personality, non-material goals, the achievement of success, personal characteristics, the fact that teachers give value interpersonal relations with students and colleagues" (Alam & Farid, 2011; Börü, 2018; Syamananda, 2017). These findings coincide with the results of our study: the extrinsic motivational factors relate to, for example, students, colleagues (teachers and administrators), parents, school, and private life. Furthermore, the factor most expressed internal factors in our study was associated with the students. The most frequently noted factor was "class crowd." Notably, the negative factors were mostly unrelated to students, with frequently cited negative factors including colleagues, parents, and school environment. Many previous studies have mentioned similar factors, including the general climate of the school, class sizes, school resources and facilities, institutional activities, peer relations, expectations about the student, leadership structure of the school, educational program, time management, school management, physical environment conditions, wages, rewards, incentives, job design, and the performance management system (Börü, 2018; Daniels, 2016; Dörnyei & Ushioda, 2013; Rasheed et al., 2016). In addition to the factors obtained in the studies in the literature, the fact that our study frequently expressed factors (class size, climatic conditions, etc.) that were not mentioned frequently made an important contribution to the literature.

Consequently, both quantitative and qualitative results show that primary school teachers have higher intrinsic motivation than extrinsic motivation. Teachers' internal factors are few but mostly positive, while external factors are numerous but mostly negative. The most important sources of motivation for teachers were students as a positive factor, physical factors, and other stakeholders as negative factors. Teacher motivation is affected by the variables of gender, age, years of seniority, and class size. Taking into account the variables emerging from this study, other research may collect data on disadvantaged groups in terms of motivation. In addition, investing with regard for the motivational factors specified in the study to improve the school setting will be important for educational institutions. The results should guide researchers working in this field, the institutions that make up education policies, and the institutions that train teachers, especially education administrators.

Limitations of the Study

A limitation of a study is the systematic bias that the researcher did not or could not control and which could inappropriately affect the results (Price & Murnan, 2004). Certain limitations of this study should be noted to provide direction for future research. The findings of the study could be subject to sampling errors because of the relatively low number of participants, and the generalization of the results is somewhat limited until this study is replicated with a larger sample. We conducted the study with primary school teachers. Thus, these conclusions can be generalized only to teachers at this level. We also conducted the study in public schools. However, in future studies, private schools can also be included. The present research was carried out in the schools in one of the eastern cities of Turkey. More comprehensive results can be obtained with a large sample group including all types of schools from different cities.

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REFERENCES

- Ada, Ş., Akan, D., Ayık, A., Yıldırım, İ., & Yalçın, S. (2013). Motivation factors of teachers. *Atatürk University Journal of Social Sciences Institute*, 17(3), 151-166.
- Alam, M. T., & Farid, S. (2011). Factors affecting teachers motivation. *International Journal of Business and Social Science*, 2(1), 298-304. <https://doi.org/10.30845/ijbss>
- Anderson, G., & Arsenault, N. (2004). *Fundamentals of educational research* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203978221>
- Atkinson, E. S. (2000). An investigation into the relationship between teacher motivation and pupil motivation. *Educational Psychology*, 20(1), 45-57. <https://doi.org/10.1080/014434100110371>
- Bacanlı, H. (2009). *Eğitim psikolojisi [Education psychology]* (14th ed.). Asal. DOI: 10.14527/9786053184850
- Başkale, H. (2016). Determination of validity, reliability and sample size in qualitative studies. *E-Journal of Dokuz Eylül University Nursing Faculty*, 9(1), 23-28.
- Bernaus, M., Wilson, A., & Gardner, R. C. (2009). Teachers' motivation, classroom strategy use, students' motivation and second language achievement. *Porta Linguarum*, 12, 25-36. <https://doi.org/10.30827/Digibug.31869>
- Börü, N. (2018). The factors affecting teacher motivation. *International Journal of Instruction*, 11(4), 761-776. <https://doi.org/10.12973/iji.2018.11448a>
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2016). *Bilimsel araştırma yöntemleri* (22nd Ed.) [*Scientific research methods*]. Pegem Akademi. <https://doi.org/10.14527/9789944919289>
- Chen, K. C., & Jang, S. J. (2010). Motivation in online learning: Testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741-752. <https://doi.org/10.1016/j.chb.2010.01.011>
- Cihanir Çankaya, Z. (2005). *Self-determination model: Autonomy support, need satisfaction and well-being*. (Unpublished doctoral dissertation). Gazi University.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. Routledge. <https://doi.org/10.4324/9780203720967>
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research*. Sage. <https://doi.org/10.1111/j.1753-6405.2007.00096.x>
- Çivilidağ, A., & Şekercioğlu, G. (2017). Studying of adaptation to Turkish culture the multidimensional work motivation scale. *Mediterranean Journal of Humanities*, 7(1), 143-156. <https://doi.org/10.13114/MJH.2017.326>
- Csikszentmihalyi, M. (2014). Intrinsic motivation and effective teaching. In *Applications of flow in human development and education* (pp. 173-187). Springer.

- Daniels, E. (2016). Logistical factors in teachers' motivation. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 89(2), 61-66. <https://doi.org/10.1080/00098655.2016.1165166>
- De Jesus, S. N., & Conboy, J. (2001). A stress management course to prevent teacher distress. *International Journal of Educational Management*, 15(3), 131-137. <https://doi.org/10.1108/09513540110384484>
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105-115. <https://doi.org/10.1037/h0030644>
- Demir, K. (2011). Teachers' intrinsic and extrinsic motivation as predictors of student engagement: An application of self-determination theory. *Education Sciences*, 6(2), 1397-1409.
- Denscombe, M. (2010). *The good research guide: for small-scale social research projects* (4th ed.). McGraw-Hill. <https://doi.org/10.1080/07294360.2017.1281284>
- Dörnyei, Z., & Ushioda, E. (2013). *Teaching and researching: Motivation*. Routledge. <https://doi.org/10.4324/9781315833750>
- Durmaz, M., & Akkuş, R. (2016). Mathematics anxiety, motivation and the basic psychological needs from the perspective of self-determination theory. *Eğitim ve Bilim*, 41(183), 111-127. <https://doi.org/10.15390/EB.2016.2942>
- Emiroğlu, O. (2017). *School administrators and teachers' opinions about the motivational sources of teachers* (Unpublished doctoral dissertation). Near East University.
- Ergin, A., & Karataş, H. (2018). Achievement-oriented motivation levels of university students. *Hacettepe University Journal of Education*, 33(4), 868-887. <https://doi.org/10.16986/huje.2018036646>
- Ertürk, R. (2016). Work motivation of teachers. *Journal of Education Theory and Practical Research*, 2(3), 1-15.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). McGraw-Hill.
- Gagné M., Forest J., Gilbert M. H., Aubé C., Morin E., & Malorni A. (2010). The motivation at work scale: Validation evidence in two languages. *Educational and Psychological Measurement*, 70(4), 628-646. <https://doi.org/10.1177/0013164409355698>.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: An introduction* (6th ed.). Longman. <https://doi.org/10.2307/3121583>
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Technology Research and Development*, 30(4), 233-252. <https://doi.org/10.1007/BF02765185>
- Hodge, V., & Austin, J. (2004). A survey of outlier detection methodologies. *Artificial intelligence review*, 22(2), 85-126. <https://doi.org/10.1023/B:AIRE.0000045502.10941.a9>
- Karip, E. (2017). Türkiye'nin TIMSS 2015 performansı üzerine değerlendirme ve öneriler (TEDMEM Analiz Dizisi 5) [*Turkey's performance on the TIMSS 2015 assessment and recommendations (TED Analysis Series 5)*]. *Türk Eğitim Derneği*.
- Kocayörük, E. (2012). Self-determination theory and relationship between perception of parents and emotional well-being of adolescents. *Turkish Psychological Counseling and Guidance Journal*, 4(37), 24-37. <https://doi.org/10.1016/j.sbspro.2012.06.117>
- Lam, S.F., Cheng, R.W.Y., & Ma, W.Y. (2009). Teacher and student intrinsic motivation in project-based learning. *Instructional Science*, 37(6), 565-578. <https://doi.org/10.1007/s11251-008-9070-9>
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31-60. <https://doi.org/10.3102/00346543052001031>
- Lodico, M. S., & Spaulding, D. D., & Voegtle, K. (2006). *Methods in educational research: From theory to practice*. Jossey-Bass
- Rasool, A., Jundong, H., & Sohail, M. T. (2017). Relationship of intrinsic and extrinsic rewards on job motivation and job satisfaction of expatriates in China. *Journal of Applied Sciences*, 17(3), 116-125. <https://doi.org/10.3923/jas.2017.116.125>
- McKnight, P. E., McKnight, K. M., Sidani, S., & Figueiredo, A. J. (2007). *Missing data: A gentle introduction*. Guilford. https://doi.org/10.1111/j.1744-6570.2008.00111_8.x
- Mekler, E. D., Brühlmann, F., Tuch, A. N., & Opwis, K. (2017). Towards understanding the effects of individual gamification elements on intrinsic motivation and performance. *Computers in Human Behavior*, 71, 525-534. <https://doi.org/10.1016/j.chb.2015.08.048>
- Masvaure, P., & Maharaj, A. (2014). Work engagement, intrinsic motivation and job satisfaction among employees of a diamond mining company in Zimbabwe. *Journal of Economics and Behavioral Studies*, 6(6), 488-499. <https://doi.org/10.22610/jebs.v6i6.510>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage. [https://doi.org/10.1016/s0272-4944\(05\)80231-2](https://doi.org/10.1016/s0272-4944(05)80231-2)
- Milyavskaya, M., & Koestner, R. (2011). Psychological needs, motivation, and well-being: A test of self-determination theory across multiple domains. *Personality and Individual Differences*, 50(3), 387-391. <https://doi.org/10.1016/j.paid.2010.10.029>

- Newstrom, J. W., & Davis, K (2002). *Organizational behaviour: Human behaviour at work* (11th ed.). Mc-Graw-Hill.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144. <https://doi.org/10.1177/1477878509104318>
- Ntoumanis, N., & Standage, M. (2009). Motivation in physical education classes: A self-determination theory perspective. *Theory and Research in Education*, 7(2), 194-202. <https://doi.org/10.1177/1477878509104324>
- Okçu, V., & Anık, S. (2017). Examining the relationship between the authentic leadership behaviour of school administrators and the level of motivation and mobbing experienced by teachers. *Anatolian Journal of Educational Leadership and Instruction*, 5(2), 63-85. <https://doi.org/10.17719/jisr.11096>
- Özdamar, K. (2017). Ölçük ve test geliştirme yapısal eşitlik modellemesi IBM SPSS IBM SPSS AMOS ve Minitab uygulamalı [Scale and test development with application of structural equation modeling IBM SPSS IBM SPSS AMOS and Minitab]. Nisan. <https://doi.org/10.4135/9781526402257.n4>
- Patrick, B. C., Hisley, J., & Kempler, T. (2000). "What's everybody so excited about?": The effects of teacher enthusiasm on student intrinsic motivation and vitality. *The Journal of Experimental Education*, 68(3), 217-236. <https://doi.org/10.1080/00220970009600093>
- Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them. *American Journal of Health Education*, 35(2), 66 - 67. <https://doi.org/10.1080/19325037.2004.10603611>
- Rasheed, M.I., Humayon, A.A., Awan, U, & Ahmed, A.U.D. (2016). Factors affecting teachers' motivation: An HRM challenge for public sector higher educational institutions of Pakistan (HEIs), *International Journal of Educational Management*, 30(1), 101-114. <https://doi.org/10.1108/IJEM-04-2014-0057>
- Rheinberg, F., & Engeser, S. (2018). Intrinsic motivation and flow. In J. Heckhausen & H. Heckhausen (Eds.), *Motivation and action* (3rd Ed., pp. 579–622). Springer. <https://doi.org/10.1017/cbo9780511499821.014>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. <https://doi.org/10.1037/0003-066x.55.1.68>.
- Schiefele, U., & Schaffner, E. (2015). Teacher interests, mastery goals, and self-efficacy as predictors of instructional practices and student motivation. *Contemporary Educational Psychology*, 42, 159-171. <https://doi.org/10.1016/j.cedpsych.2015.06.005>
- Shen, B., Li, W., Sun, H., & Rukavina, P. B. (2010). The influence of inadequate teacher-to-student social support on amotivation of physical education students. *Journal of Teaching in Physical Education*, 29(4), 417-432. <https://doi.org/10.1123/jtpe.29.4.417>
- Spittle, M., Jackson, K., & Casey, M. (2009). Applying self-determination theory to understand the motivation for becoming a physical education teacher. *Teaching and Teacher Education*, 25(1), 190-197. <https://doi.org/10.1016/j.tate.2008.07.005>
- Standage, M., Duda, J. L., & Ntoumanis, N. (2006). Students' motivational processes and their relationship to teacher ratings in school physical education: A self-determination theory approach. *Research Quarterly for Exercise and Sport*, 77(1), 100-110. <https://doi.org/10.1080/02701367.2006.10599336>
- Syamananda, P. (2017). Factors affecting EFL teachers' motivation in Thai university: A case study of EFL teachers at tertiary level. *Language Education and Acquisition Research Network*, 10(2), 120-131. Retrieved from <https://eric.ed.gov/?id=EJ1229626>
- Thoonen, E. E., Sleegers, P. J., Oort, F. J., Peetsma, T. T., & Geijsel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors, and leadership practices. *Educational Administration Quarterly*, 47(3), 496-536. <https://doi.org/10.1177/0013161X11400185>
- Uçar, R., & İpek, C. (2019). The relationship between high school teachers' perceptions of organizational culture and motivation. *Journal of Education and Training Studies*, 7(7), 102-117. <https://doi.org/10.11114/jets.v7i7.4198>
- Van Teijlingen, E., & Hundley, V. (2010). The importance of pilot studies. *Social Research Update*, 35(4), 49-59. <https://doi.org/10.7748/ns2002.06.16.40.33.c3214>
- Whatley, A. (1998). Gifted women and teaching: A compatible choice?. *Roeper Review*, 21(2), 117-124. <https://doi.org/10.1080/02783199809553942>
- Williams, G. C., Saizow, R. B., & Ryan, R. M. (1999). The importance of self-determination theory for medical education. *Academic Medicine*, 74(9), 992-995. <https://doi.org/10.1097/00001888-199909000-00010>
- Yasmeen, Z., Mushtaq, I., & Murad, M. (2019). Intrinsic and extrinsic motivation of teachers in special education secondary school: A qualitative study. *Journal of Educational Research*, 22(2), 15-30. Retrieved from <http://jer.iub.edu.pk>
- Yazıcı, H. (2009). Teaching profession sources of motivation and basic attitudes: A theoretical overview. *Kastamonu Education Journal*, 17(1), 33-46.

TÜRKÇE GENİŞLETİLMİŞ ÖZET

Öğretmen motivasyonu eğitim sürecinin kilit noktalarından biridir. Motivasyon kavramını anlamak ve bu özelliğini geliştirmek, eğitimin kalitesinin artırılmasına ve belirlenen vizyon doğrultusunda daha verimli bir şekilde hedeflere ulaşılabilmeye olanak sağlayabilir (Emiroğlu, 2017). Öğretmen motivasyonu eğitim sürecinde belirlenen amaçlara ulaşmada vazgeçilmez olmakla birlikte, yalnızca doğrudan öğrencilerle ilgili olarak düşünmemek gereklidir. Öğretmen motivasyonu eğitim reformlarının ilerlemesi için de önemlidir. İlk olarak, motive olmuş öğretmenlerin eğitim reformları ve ilerici bir mevzuat için çalışma olasılığı daha yüksektir. İkincisi -ve belki daha da önemlisi- politik reformların uygulanmasını garanti eden, motive olmuş öğretmendir. Son olarak, öğretmenlerin motivasyonu öğretmenlerin kendilerinin memnuniyetleri ve doyumlari için önemlidir (De Jesus & Conboy, 2001). Karip (2017) etkili bir öğretimin, öğretmenlerin beceri ve motivasyonuna bağlı olduğunu belirtmiştir. Öğretmenlerin motivasyonu, işlerine yönelik enerjilerini, heyecanlarını, coşkularını içeren bir kavramdır. Bir öğretmenin öğretme coşkusunu, öğrencilerin daha ilgili, enerjili ve meraklı olmalarını, ayrıca hem kendilerinin hem de öğrencilerin motivasyonunu geliştirmektedir (Patrick vd., 2000). Öğretmen motivasyonunu canlı tutmak, motivasyonu düşüren etkenleri azaltmak uzun vadede eğitim için yapılacak en önemli yatırımdır.

Araştırmada öğretmenlerin motivasyonunu betimlemek ve motivasyona etki eden kategorik değişkenleri belirlemek amaçlanmıştır. Ayrıca bu doğrultuda elde edilen verileri desteklemek amacıyla öğretmenlerin motivasyon boyutlarında ortaya çıkan farklılığa etki eden içsel ve dışsal etkenleri belirlemek de amaçlanmıştır. Bu amaçla şu sorulara yanıt aranmıştır: (i) Sınıf öğretmenlerinin motivasyonu ne düzeydedir? (ii) Sınıf öğretmenlerinin motivasyonu cinsiyet, yaş, kıdem yılı, görev yeri, sınıf düzeyi, öğrencileriyle birlikte olma yılı ve sınıf mevcudu değişkenlerine göre farklılaşmaktadır mıdır? (iii) Sınıf öğretmenlerinin motivasyonunu etkileyen içsel ve dışsal etmenler nelerdir?

Araştırma sınıf öğretmenlerinin motivasyonunu hem betimsel olarak hem etki eden değişkenler hem de etkileyen faktörler açısından ele alması bakımından önemlidir. Alana ilişkin çok sayıda çalışma olmasına karşın, belirli bir kuram çerçevesinde ve karma yöntemle yürütülmüş çalışmaların sınırlı olması dolayısıyla, çalışmanın alan yazına bir yenilik getireceği düşünülmektedir.

Araştırma karma yöntem desenlerinden açıklayıcı desenle yürütülmüştür. Araştırma Erzurum ilinin tüm ilçelerini kapsayacak şekilde 39 okuldan 414 öğretmenle yürütülmüştür. Araştırmanın nicel boyutunda “Çok Boyutlu İş Motivasyonu Ölçeği” ve “Kişisel Bilgi Formu” kullanılmıştır. Nitel boyutta ise “Öğretmen Görüşme Formu” kullanılmıştır. Nicel veriler betimleyici teknikler, ANOVA testi ve t testi ile çözümlenmiştir. Nitel veriler ise içerik analizi ile çözümlenmiştir. Görüşme metinleri iki kodlayıcı tarafından kodlanmış ve katılımcı teyidi yapılmıştır.

Öğretmenlerin içsel motivasyonunun dışsal motivasyonundan daha yüksek olduğu belirlenmiştir. Öğretmen motivasyonu, farklı boyutlarda cinsiyet, yaş, kıdem yılı, sınıf mevcudu ve yerleşim yeri değişkenleri açısından farklılık göstermiştir. Dışsal motivasyon etkenleri içsel etkenlerden fazla ve çoğunlukla olumsuz görüşlerden oluşmaktadır. İçsel motivasyon açısından en önemli etkenin “öğrencilere bir şeyler öğretebilme” olduğu belirlenmiştir. Dışsal motivasyon açısından da “sınıf kalabalaklılığı” dikkat çeken etken olmuştur.

Araştırmada motivasyon boyutlarının ortalamaları incelendiğinde öğretmenlerin özerklik yönünden yüksek bir düzeyde olduğu söylenebilir. Ertürk’ün (2016) çalışmasında da benzer şekilde, öğretmenlerin içsel motivasyonunun, dışsal motivasyonuna göre daha yüksek düzeyde olduğu belirlenmiştir. Araştırmadan elde edilen bu sonuç istendik bir sonuçtur. Çünkü öğretmenlik mesleğinde her iki motivasyon türü de önemli olmakla birlikte içsel motivasyon daha önemli görülmektedir. İstenen, öğretmenlerin içsel olarak güdülenmeleridir. Araştırmalarda, içsel motivasyonu yüksek olan bireylerin, dışsal motivasyonu yüksek olanlara oranla daha başarılı oldukları belirlenmiştir (Yazıcı, 2009).

Cinsiyet değişkeni açısından, kişisel düzenleme boyutunda kadın öğretmenlerin, dışsal düzenleme-maddesel ve motive olamama alt boyutlarında ise erkek öğretmenler lehine farklılaşma görülmüştür. Bu sonuç kadın öğretmenlerin daha özerk bir düzeyde olduklarını göstermektedir. Bu sonuçlar cinsiyetin, motivasyona etki eden bir etken olduğunu ortaya koymaktadır. Bu sonuç Uçar ve İpek (2019)'un çalışmasının sonuçlarıyla örtüşmektedir. Yaş değişkeni açısından, 21-29 yaş grubunda bulunan öğretmenlerin 30-35 yaş grubunda olanlara oranla daha yüksek içsel motivasyona sahip oldukları görülmüştür. Ertürk'ün (2016) çalışmasında ise bu sonucun aksine 41 yaş ve üzeri öğretmenlerin içsel motivasyonunun 20-30 yaş aralığındaki öğretmenlerden daha yüksek olduğu belirlenmiş olup bu çalışmanın sonucuya ulaşımaktedir. Mesleki kıdem yılı açısından, 1-5 yıl arası mesleki kıdem sahip öğretmenlerin 6-10 yıl kıdem sahip olanlara oranla içsel motivasyonunun daha yüksek olduğu görülmüştür. Ertürk'ün (2016) çalışmasında, bu çalışmanın aksine daha kıdemli öğretmenlerin içsel ve dışsal motivasyon boyutlarında daha yüksek bir ortalamaya sahip olduğu belirlenmiştir. Sınıf mevcudu açısından bakıldığından, içsel motivasyon açısından gruplar arası anlamlı bir farklılaşma görülmüştür. Post hoc testinde bu farklılık belli bir grup lehine anlamlı çıkmasa da ortalama farkları incelendiğinde 16-20 öğrenciye sahip olanlar ile 21-25 öğrenciye sahip olanların 36 ve üzeri öğrenciye sahip olanlara oranla oldukça yüksek içsel motivasyona sahip olduğunu göstermiştir. Ayrıca araştırmanın nitel boyutunda elde edilen görüşler incelendiğinde, en sık dile getirilen olumsuz dışsal motivasyon etkeninin sınıf mevcudu olduğu görülmüştür. Görüşler incelendiğinde, özellikle çok kalabalık sınıflarda görev yapan öğretmenler ile çok az sayıda öğrencisi bulunan öğretmenlerin sınıf mevcuduna ilişkin olarak olumsuz görüşler dile getirdiği, aksine ortalama yirmi civar sınıf mevcuduna sahip olan öğretmenlerin bu konuya ilişkin olumlu görüşlere sahip olduğu görülmüştür. Dolayısıyla sınıf mevcudunun önemli bir motivasyon etkeni olduğu söylenebilir.

Öğretmenlerin içsel motivasyon etkenlerinin daha az ancak olumlu etkenlerden oluşması, dışsal etkenlerinin oldukça fazla ancak sıklık olarak çoğunlukla olumsuz etkenlerden oluşması dikkat çekicidir. Alan yazındaki pek çok çalışmada da dışsal etkenlerin daha fazla dile getirildiği görülmektedir (Daniels, 2016; Dörnyei & Ushioda, 2013, s.64). İçsel motivasyonla ilgili dile getirilen etkenlerin öğrencilere, mesleğe, ders sürecine ve bireysel etkenlere ilişkin olduğu belirlenmiştir. Etkenlerin büyük bir bölümünün öğrencilere ilişkin olduğu görülmüştür. Öğrencileri geleceğe hazırlama isteği, öğrenci sevgisi, öğrencilere yararlı olma isteği gibi etkenler öne çıkmıştır. Bu sonuca benzer sonuçlar alan yazında sıkça görülmektedir (Alam & Farid, 2011; Börü, 2018; Syamananda, 2017; Whatley, 1998). Dışsal motivasyonla ilgili dile getirilen etkenlerin öğrencilere, iş arkadaşlarına (öğretmenler, yöneticiler), velilere, okula, özel yaşama ve diğer etkenlere ilişkin olduğu görülmüştür. Börü (2018)'in çalışmasında öğretmenlerin dışsal motivasyon etkenlerinin öğrenciler, ulusal eğitim politikaları, okul yönetimi ve meslektaşlara ilişkin olduğu belirtilmiş olup bu çalışmada belirtilen etkenlerle örtüşmektedir. Sonuç olarak araştırmanın nicel boyutunda elde edilen hem betimsel hem kestirimsel istatistiksel verilerin, nitel verilerle desteklendiği söylenebilir. Gelecekte farklı kuramlar çerçevesinde, daha geniş örneklem gruplarıyla ve farklı şehirlerden ve branşlardan öğretmenlerin yer alacağı çalışmalar yürütülmesi yararlı olacaktır.