Evaluation of Teachers' Motivation and Participation Levels in Professional Development Activities

Fatih Mutlu Özbilen[1] Gökhan Günay[2] B. Barış Yıldız[3]

ABSTRACT

The aim of this research is to evaluate teachers' levels of motivation and participation in professional development activities. The research is descriptive and designed according to the screening model. The sample of the study consisted of 388 teachers working in state schools in Istanbul in the 2019-2020 academic year and determined by the simple random sampling method. As a result of the analyses, it was determined that teachers' levels of motivation and participation in professional development activities were high. In addition, it was found that motivation levels of teachers differed significantly in favour of female teachers, those who had bachelor's degree and choose teaching profession of their own will, whereas it did not differ significantly according to the branches. On the other hand, it was determined that participation levels of teachers in professional development activities did not differ significantly according to gender, branch and education level, however, they differed significantly in favour of those who chose teaching profession of their own will. Finally, a moderate level, positive and statistically significant relation was found between teachers' motivation and their levels of participation in professional development activities. In fact, it was found that the highest relation with professional development activities was in the dimension of identified regulation, yet there was no significant relation with external regulation.

Keywords: Professional development, professional development activities, motivation, teacher motivation

[1]Corresponding Author: Dr. Fatih Mutlu Özbilen, Ministry of National Education, fatihmutluozbilen@gmail.com, ORCID: 0000-0003-3187-0028
[2]Gökhan Günay, Ministry of National Education, gunay_gokhan17@hotmail.com, ORCID: 0000-0002-1430-9186
[3] Dr. B. Barış Yıldız, Ministry of National Education, bbaris_yildiz@windowslive.com, ORCID: 0000-0003-1247-3158

Introduction

Today, education is at the centre of all change and development processes (Güneş, 2016). It can be stated that education is one of the most basic development indicators in the inter-communal competition process. Countries attach more importance to improvement of their educational levels relatively in order to meet the need of productive and qualified workforce in the battle of having a voice in science and technology. In the words of İlğan (2013), social development is related to the quality of education offered to citizens. Advancing in a social sense and reaching the welfare level of developed countries is only possible with an effective education in schools (Boydak-Özan, Şener, and Polat, 2014; Elçiçek and Yaşar, 2016). In other words, the most valuable investment tool for a prosperous future is education (Kaya, 2019). For an effective education, all elements (teacher, physical facilities, environment, instructional program, teaching materials, etc.) that are likely to affect students, who are the target audience of the system should be continuously improved. Teacher quality is the most important factor affecting student learning among the mentioned factors (İlğan, 2013). In the process of qualified education and increasing student success, the quality of teachers comes into prominence (Genç, 2010; Özer, 2008). Any education system does not have the power of producing a service beyond teacher qualifications. Therefore, the starting point of all education reforms is the teacher (Abazoğlu, 2014; Guskey, 2002). Countries are in an ongoing competition with each other in order to increase the quality of teachers.

Increasing teacher quality contributes to the quality problem in education to a certain extent, however teacher motivation can also be expressed as a crucial factor affecting the quality of education and training process and teacher quality. Teacher motivation not only has an important effect on student achievement (Akhtar, 2013; Hayden, 2011), but also contributes to the effectiveness of in-class teaching and school development (Ofoegbu, 2004). Teachers' willingness to perform their duties, in other words, to be motivated, is considered important in terms of providing student motivation and facilitating their learning (Demir, 2018). According to Neves de Jesus and Lens (2005), teacher motivation is necessary in motivating students towards learning, realizing educational reforms through teachers, and providing teachers' own personal satisfaction. In other words, while teacher motivation contributes to student learning and professional development in particular, it also acts as a catalyzer in the implementation of educational reforms. In this respect, it can be said that teacher motivation is an important factor in determining teacher quality.

Improving teacher quality also contributes to the overall development of the school in institutional terms. In this respect, teacher qualification can be stated as a prerequisite for an effective education. Buldu (2014) points out that for an effective education, there should be teachers who can constantly update themselves, respond to the current needs of society, internalize social changes and reflect them to the teaching process, be a model for students, learn contemporary pedagogical approaches and actively use them. In this context, teaching is a profession changing constantly and having a dynamic feature that needs to update itself. Likewise, complex teaching methods are needed to provide 21st century student competencies (Darling-Hammond, Hyler, and Gardner, 2017). In the 21st century, in order for teachers to perform their teaching profession more effectively, they should not leave the learning process they are in, and even adopt the habit of continuous learning and self-renewal (Çakır, 2013). Additionally, considering that change will be perpetual, teachers have the obligation to learn,

develop and progress throughout their professional life (İlğan, 2020). It is essential that they renew, improve and keep up-to-date their expertise in their field. Otherwise, teachers who continue their teaching process without putting anything on the existing knowledge will cease to be the primary source of information like old books, and will lose their reputation in society (Aslanargun and Atmaca, 2017). Besides, that the perceptual equivalent of the concept of "good teacher" is "a teacher who constantly improves oneself personally and professionally" clearly explains the importance of professional development (Güneş, 2016; Seferoğlu, 2004). Genç (2010) states that teacher success is closely related to professional development activities which will support their personal and professional development. Accordingly, professional development, in a sense, is related to the quality of teacher, and therefore directly to the quality of education (Eroğlu and Özbek, 2018a).

When the literature is examined, there are studies in which teachers have expressed opinions that some professional development activities are not beneficial (Altun and Vural, 2012; Boydak-Özan, Şener and Polat, 2014; Kahyaoğlu and Karataş, 2019), studies that evaluate the need for new models and make suggestions in order to ensure the professional development of teachers draw attention (Abazoğlu, 2014; Buldu, 2014; İlğan, 2013; İlğan, 2020; Köseoğlu, Tümay and Üstün, 2010). As a matter of fact, studies indicate that teachers do not consider themselves competent in professional sense (Aslanargun and Atmaca, 2017) and do not participate in professional development activities much (Çakır, 2013). However, success of the education system increases at the level of teachers' need for professional training (Özer-Özkan and Anıl, 2014). Many studies reveal that teachers' participation in professional development activities increases student success (Johnson, Kahle, and Fargo, 2007; Lumpe, Czerniak, and Beltyukova, 2012; Yoon, Duncan, Wen-Yu Lee, Scarloss, and Shapley, 2007). Similarly, teacher motivation can be considered as another factor that has an impact on student achievement. Studies indicate that teacher motivation has an important effect on student achievement (Akhtar, 2013; Hayden, 2011). In addition, professional development activities have a great importance in increasing professional motivation, supporting career plans, and increasing the quality of education by increasing classroom and school success (Buldu, 2014). These activities evoke teachers' desire to seek the better in education by improving their attribute to be open to development (Özer, 2008). As Aslanargun and Atmaca (2017) stated, professional development activities motivate teachers to change and innovation. In this regard, it can be said that professional development activities have an important place in keeping teachers' motivation on teaching process dynamic. In other words, it can be considered that there can be a connection between teacher motivation and participation in professional development activities. From this point of view, within the scope of this study, it is thought that teacher motivation and participation in professional development activities, which are considered to have such an impact on teachers' continuous development and student success, need to be examined together.

Aim of the research

The aim of this research is to evaluate teachers' levels of motivation and participation in professional development activities.

Targets of the research

In line with this main purpose, answers were sought for the following sub-goals:

1) How are the teachers' levels of motivation and participation in professional development activities?

2) Do teachers' motivation levels differ significantly according to the variables of gender, branch, education level and reason for choosing teaching profession?

3) Do teachers' participation levels in professional development activities differ significantly according to the variables of gender, branch, education level and the reason for choosing teaching profession?

4) Is there a significant relation between teachers' levels of motivation and participation in professional development activities?

Literature Review

This section includes a literature review about the research subject. In this context, teacher motivation and professional development activities were discussed under two separate headings.

Teacher Motivation

Motivation is defined as the power of performing at a high level and eliminating obstacles standing against change in general sense (Tohidi and Jabbari, 2012). Moreover, motivation is a driving force that directs, controls and resists human behaviour (Tohidi and Jabbari, 2012). Since it is an important factor in energizing the individual and making them willing to act, it is considered as the most important factor that ensures the effectiveness of the teaching process (Akbaba, 2006).

Teacher motivation, on the other hand, includes both teacher' the desire to teach and the personal style towards students in the teaching process and is explained by the teacher's enthusiasm and job satisfaction in this process (Revee and Su, 2014). Also referred to as "teaching motivation" (Dörnyei and Ushioda, 2013), Han and Yin (2016) define teacher motivation as the effort put into teaching with intrinsic values towards choosing to continue teaching and teaching, which are influenced by many contextual factors. Hence, it can be said that while teacher motivation has an important effect on student achievement, it also stands out as an important component of teacher quality. In fact, Akuok, Dwumah, and Baba (2012) argue that there is a significant relation between teacher motivation and quality education in their study. In other words, it is seen that the prerequisite for a qualified education is highly motivated teachers. Thoonen, Sleegers, Oort, Peetsma, and Geijsel (2011) concluded in their study that factors motivating teachers contribute to the improvement of teaching practices. Studies on teacher motivation indicate that highly motivated teachers are a prerequisite for a qualified education. In other words, it can be said that teacher motivation positively affects all other factors affecting the process of education and training. For this reason, teacher motivation is considered as an important feature that should be taken into consideration in being selected and continuing the profession (Sinclair, 2008).

Professional Development Activities

Professional development, which has such an important place in performing professions, is conceptually defined as the process of improving the knowledge and skills of individuals related to their profession (Bakıoğlu and Kirişçi-Sarıkaya, 2018; Güneş, 2016). In terms of

teaching, it is expressed as all of the factors improving an individual's knowledge, skills, field expertise and many other characteristics (Altun and Vural, 2012). According to Demirli, Demirkol, and Özdemir (2010), professional development is the process of individuals' developing the behaviours necessary for them to find a suitable place in an increasingly complex working life. Effective professional development, on the other hand, is defined as structured professional learning that leads to changes in teaching practices and enables the improvement of students' learning outcomes (Darling-Hammond, Hyler, and Gardner, 2017). The concept of professional development has emerged over time with the evolution of concepts such as in-service training, personnel development, career development, and human resources development. Today, it is defined as staff-centred, long-term, on-the-job learning experiences (Bümen, Ateş, Çakar, Ural, and Acar, 2012; Güneş, 2016; İlğan, 2013). Bayır and Köseoğlu (2013) state that professional development is not in the form of courses in which information is given in a short time, which they express it as old-school, and that it is a long-term process enabling teachers to progress in terms of pedagogical and field expertise. In a similar vein, Öztürk-Akar (2006) states that professional development trainings have turned into a format prioritizing professional interactions and caring the opinions and thoughts of teachers who are practitioners, thus emphasizing individual development, by stripping from a format in which, after decisions are taken at the centre, teachers' mandatory participation is ensured and success is expected in practice as a result of theoretical knowledge conveyed. According to the new understanding, the concept basically emphasizes long-term personal progress and development in professional sense. Buldu (2014), thus, defines teacher professional development as teachers' progress in understanding educational issues and problems, providing students with knowledge and skills related to their field, contributing to the development of students in all aspects, creating different and rich learning environments, planning and evaluating teaching, establishing effective social relations, and contributing to the development of the school. Uğurlu, Dolmacı, and Evran-Acar (2018) consider professional development as a process and define it as providing necessary opportunities for teachers to improve their professional learning, knowledge and skills.

As can be understood from the definitions, the focus of professional development process is to make student learning more qualified. Professional development has an effect on the development of teachers' readiness in terms of teaching skills as well as on their potential to affect student achievement (Bayar, 2014). Teachers are expected to reflect the knowledge, skills and experiences they have acquired through professional development activities in a way that contributes to the students' learning more effectively and developing different point of views on the lesson/subject (Avalos, 2011; Özdemir, 2016). In the words of Feiman-Nemser (2001), student learning is directly related to what and how teachers teach. In other words, there is a connection between student learning and the knowledge, skills and connections that teachers bring to the implementation of the course and the options they offer regarding teaching styles. Therefore, it can be said that it is aimed to increase students' knowledge and skills through professional development of teachers. As a matter of fact, it is seen in studies that professional development activities have positive effects on student achievement (Lumpe, Czerniak, and Beltyukova, 2012; Yoon et al., 2007). Therefore, it can be said that professional development is primarily aimed at improving student learning positively.

When we look at the main purpose of professional development, it is expressed as meeting the needs of teachers for ensuring and developing student learning (Özer, 2008). Professional development activities have an important place in achieving this goal. Professional

development activities are defined as teachers' systematic efforts to achieve change in classroom practices, attitudes, beliefs and learning outcomes (Guskey, 2002). Borko, Jacobs, and Koellner (2010) state that professional development activities increase teachers' knowledge and practical skills, thus they support student learning and success. According to İlğan's (2013) statement, professional development activities are effective to the extent that they increase student learning as well as improve teachers. Professional development, the contribution of which has been clearly demonstrated on student learning, is provided before and during the service process, in other words, through professional development activities offered or preferred until retirement, it can be said that the most effective activities are the ones expected to affect student learning during the practice of the profession. For professional development, teachers need to participate in collective activities that they take in areas where they want to improve themselves individually and that are presented as embedded in the work. When effective professional development activities are examined, they are generally considered as activities carried out as embedded in daily teaching work. İlğan (2013) describes effective professional development activities as embedded learning opportunities which include field knowledge and methods and techniques related to the field, are allocated sufficient time, receive support from senior management, are carried out in cooperation and are continuous. Teachers engage in interactive, integrated, applied and result-oriented work with professional development activities within the work, and they work in teams such as in-department, inter-departmental, group and branch teachers (İlğan, 2020). It is stated that the tasks spread into a working day to make the teacher active, especially at school, such as mentoring, student coaching, group study teams, etc. will be more efficient in terms of professional development (İlğan, 2013). Thus, professional development is provided in the implementation process (in-service) by transferring professional knowledge and skills to practice, developing new knowledge, and transferring them to students, colleagues and the environment (Güneş, 2016).

In the professional development process, in-service training activities have an important place in addition to the professional development activities embedded in the work (Özmantar & Önala, 2017). In-service training activities are carried out to increase expertise and skills of teachers, develop educational goals, improve learning environments and develop teaching materials for the sake of increasing educational performance of teachers at school (Göksoy and Dinç, 2017). It can be expressed that both in-service training activities provided outside the implementation process of the profession and the activities embedded in work for school-based professional development and interaction with stakeholders contribute to corporate development on a micro-scale and to overall development of national education on a macro-scale. When evaluated from this aspect, as Genç (2010) states, professional development activities point to lifelong learning in a way enabling continuous learning both formally and informally. However, in recent years, training such as courses, seminars and conferences given by experts for the needs of the school and school-based professional development activities in which teachers do research through teamwork for increasing the quality of education stand out in terms of being accessible, need-oriented of teachers and allowing teachers to take active roles (Özer, 2008). In addition, professional development activities of teachers can be formal and informal in pre-service and in-service professional development periods, as well as traditional-innovative, individual and collaborative (Bakioğlu and Kirişçi-Sarıkaya, 2018). Furthermore, professional development activities can be approached at institutional and individual level (Özdemir, 2016). Today, although it seems that activities embedded in the work and based on professional interaction are

more preferred, continuous introduction of new learning theories in pedagogical sense and innovations in teaching technologies lead to diversification of professional development activities. In the research, participation in professional development activities was examined within the scope of the school-based professional development (SBPD) model. In the SBPD model, professional development is considered as processes that support the development of professional knowledge, skills, values and attitudes at school or outside of school, and contribute to the teacher in creating effective learning-teaching environments (MEB, 2010). In this context, based on this model, the research subject has been studied.

Methodology

In this section, information about the research design, sample, data collection tools and data analyses are given.

Research Design

The research is based on the positivist paradigm. Positivism argues that real events can be analyzed logically by observing empirically. Positivist research methodology is expressed as an approach that suggests removing the complexity of the outside world with micro experiments in the laboratory environment and creating policies based on the results obtained (Kaboub, 2008). This research, which is based on a positivist paradigm, is descriptive and has been designed according to a survey model. Screening models are based on presenting the existing situation as it is with an objective approach (Karasar, 2009). In this study, it was tried to evaluate the motivation levels of permanent teachers working in schools affiliated to the Ministry of National Education and their levels of participation in professional development activities.

Site and Subject Selection

The research was carried out with classroom and branch teachers working in public schools in Istanbul. The reason why this city was chosen as the application point of the study is that it is the city where two of the researchers work. In this context, data were collected from the teachers using the simple random sampling method, with the thought that it could easily reach the participants. With this thought, teachers were made to fill in data collection tools easily and explanations were made through instant feedback to the incomprehensible items in the scales.

While determining the subject of research, firstly the literature on the subject was reviewed. It is thought that the number of professional development activities organized by the Ministry of National Education has increased recently and it is important to determine the level of participation of teachers in these activities. However, it was seen that participation in professional development activities was not evaluated in the literature together with the concept of motivation that could significantly affect itself. For this reason, it was thought that the level of motivation of teachers and their participation in professional development activities should be determined first. Afterwards, it was tried to reveal whether these two related concepts are actually related or not with a scientific research.

Data Collection Tools

In the study, Motivation Scale developed by Gagné, Forest, Gilbert, Aube, Morin, and Malorni (2010), and adapted to Turkish by Çevik and Köse (2017), as well as, Professional Development Activities Scale for Teachers developed by Eroğlu and Özbek (2018b) were used.

Motivation Scale, used to determine teachers' motivation levels, is a five-point Likert-type scale and its items are answered as "Completely disagree (1), Disagree (2), No idea (3), Agree (4), and Completely agree (5)". Scores that can be obtained from the 12-item scale range from 12 to 60. It was seen that while the scale was adapted to Turkish, the four-dimensional structure of the scale was preserved during the exploratory factor analysis process in testing structure validity. These dimensions are "intrinsic motivation", "identified regulation", "introjected regulation" and "external regulation". After the exploratory factor analysis, confirmatory factor analysis was also conducted for construct validity. In this process, Chi-Square Goodness of Fit Test was conducted; fit index values such as CFI, TLI and RMSEA were calculated. Within the scope of the reliability analyses, the Cronbach Alpha value was calculated as .88 for the total scale. In this study, the Cronbach Alpha value calculated for the reliability analysis was .81.

Professional Development Activities Scale for Teachers, used to determine teachers' participation levels in professional development activities, is a five-point Likert type scale and its items are answered as "Never (1), Rarely (2), Usually (3), Often (4), and Always (5)". The scores that can be obtained from the 29-item scale range between 29 and 145. While developing the scale, Exploratory and Confirmatory Factor Analyses were conducted to determine the construct validity. First, KMO coefficient was calculated through Kaiser-Meyer-Olkin (KMO) test carried out by the researchers, and then the Bartlett Sphericity Test was conducted to examine the normal distribution of the data. After the exploratory factor analysis based on the values reached, a scale consisting of 29 items and 6 factors explaining 57.485% of the total variance was obtained. Confirmatory factor analysis was carried out to support that the scale had a 6-factor structure, and then a modification process was applied between some items. In both analyses, Chi-Square Goodness of Fit Test was conducted; fit index values such as GFI, AGFI, CFI, RMSEA, RME and SRMR were calculated. Within the scope of the reliability analyses, the Cronbach Alpha value was calculated as .91 for the total scale. Besides, during the reliability analysis process, Guttman split-half coefficient was found as .80 and Spearman-Brown coefficient as .83. Additionally, the correlation coefficient between the two applications was determined as .791 through test-retest method. In this study, the Cronbach Alpha value was calculated for the reliability analysis and found as .94.

Data Analyses

Before the analysis of the research data, the normality distributions of the data obtained from the scales were examined in order to determine the statistical test types to be used first. Based on the fact that the skewness and kurtosis coefficient values were between -1 and +1 and the arithmetic mean, mode, and median values did not diverge far from each other, it was assumed that the data met the normality assumption. In this regard, it was decided to use parametric test types; on SPSS 22 program, whether independent variables created a significant difference on dependent variables or not was determined via Independent Samples t-Test and the relation between dependent variables was determined by calculating the Pearson Correlation Coefficient (r).

Validity and Ethical Considerations

At the point of validity of the research, all three researchers conducted the research as experts in educational sciences. Depending on the purpose of the study, scales that were previously developed by experts in the field were used with permission and relevant data were collected from teachers. In addition, the participants were selected as classroom and branch teachers and a diversity of participants was achieved. In terms of reliability, the characteristics of the participant were clearly stated in the study, and those who read the research were made to see these characteristics. While collecting data during the research process, the purpose of the research was clearly expressed to the participating teachers. In this way, teachers who wanted to participate in the research voluntarily were made to fill in the scales. In this process, the researchers applied the scales to the teachers themselves, and instant feedback was given to the teachers about the incomprehensible items during the filling in the scales. In addition, based on the data obtained from the scales, the Cronbach Alpha reliability coefficient value was calculated and the findings regarding the results of all analysis were reported in the research.

Findings

In this section, the findings obtained after the analysis of the research data are given respectively. The distribution of the teachers who constituted the sample of the study according to their demographic characteristics is given in Table 1 below.

Table 1. Distribution of the teachers in the sample according to their demographic characteristics

Characteristics	Variable	f	%
Gender	Female	265	68.0
	Male	123	32.0
	Total	*388*	*100*
Branch	Class Teacher	161	41.5
	Branch Teacher	227	58.5
	Total	*388*	*100*
Education Level	Undergraduate	308	79.0
	Postgraduate	80	21.0
	Total	*388*	*100*
Reason for Choosing Teaching Profession	Inner (My own will)	304	78.0
	External (Family will, job guarantee, salary etc.)	84	22.0
	Total	*388*	*100*

The research sample consisted of 388 teachers working in state schools in Istanbul and determined by the simple random sampling method. 265 of the teachers in the sample group were female and 123 were male. Additionally, 161 of these teachers were classroom teachers while 227 of them worked as branch teachers. 308 of the teachers received undergraduate education and 80 of them completed their postgraduate education. In addition, while 304 of the teachers chose teaching profession of inner reason (their own will), 84 of them preferred it for external reasons (family will, job guarantee, salary etc.)

In line with the responses of the teachers to the Motivation Scale and Professional Development Activities Scale, normality distribution of the data was examined firstly and the analyses were carried out accordingly. In this context, descriptive statistics values obtained from the scales are given in detail in Table 2 below.

Table 2. Descriptive statistics for the scales

Scales	N	$\bar{X}$	Median	Mode	ss	Skewness	Kurtosis	Min. and Max. Values
Motivation Scale	388	42.96	43.00	43.00	6.39	-.428	.392	23.00-57.00
P. D Activities Scale	388	113.38	114.00	101.00	15.41	-.166	.126	54.00-145.00

When Table 2 above is examined, it is seen that the values of skewness and kurtosis coefficients of the data in the Motivation Scale and Professional Development Activities Scale are between -1 and +1. According to these values, it can be stated that the data indicate a normal distribution (Büyüköztürk, Çokluk-Bökeoğlu, and Köklü, 2009; Tabachnick and Fidell, 2013). In addition, since the mean, median and mode values are seen to be close to each other, it can be considered that data distributions do not deviate excessively from normal (Büyüköztürk et al., 2009; Büyüköztürk, 2010). Accordingly, Independent Samples t-Test, one of the parametric tests, was conducted in the analyses in order for comparison of the dependent variables with regard to the independent variables; and Product-Moment Correlation Coefficient (r) was calculated in order to examine the existence of the relation between the two dependent variables.

According to Table 2, the arithmetic mean of the total scores obtained from the 12-item Motivation Scale is $\bar{X}$=42.96. Considering that the scores which can be obtained from the scale are between 12 and 60, it can be stated that teachers' motivation is high. The arithmetic mean of the total scores obtained from the 29-item Professional Development Activities Scale is $\bar{X}$=113.38. Considering that the scores which can be obtained from the scale vary between 29 and 145, it can be thought that teachers' views on professional development activities are high.

In Table 3 below, the findings for the Independent Samples t-Test conducted to determine whether the motivation levels of teachers differ significantly according to the variables of gender, branch, education level and reason for choosing teaching profession.

Table 3. Findings for the Independent Samples t-Test conducted to examine the total scores of teachers' motivation levels according to the variables of gender, branch, education level and reason for choosing teaching profession

Variable	Group	N	$\bar{X}$	ss	sd	t	p
Gender	Female	265	43.43	6.08	386	2.120	.035*
	Male	123	41.96	6.92			
Branch	Class Teacher	161	42.75	5.96	386	-.551	.582
	Branch Teacher	227	43.11	6.69			
Education Level	Undergraduate	308	43.30	6.33	386	2.054	.041*
	Postgraduate	80	41.66	6.49			
Reason for Choosing Teaching Profession	Inner (My own will)	304	44.35	5.76	386	8.883	.00*
	External (Family will, job guarantee, salary etc.)	84	37.96	6.05			

*p<0.05

When Table 3 above is examined, it is seen that the total score means of the teachers' motivation levels do not demonstrate a significant difference according to the branch variable (p>.05). However, it was found that the total score means of teachers' motivation demonstrated a significant difference according to the variables of gender [t(386)= 2.120, p<.05], education level [t(386)= 2.054, p<.05] and reasons for choosing teaching profession [t(386)= 8.883, p<.05]. In this context, it was revealed that female teachers ($\bar{X}$=43.43) had higher motivation than male teachers ($\bar{X}$=41.96), those with a bachelor's degree ($\bar{X}$=43.30) had higher motivation than those with a master's degree ($\bar{X}$=41.66) and those who chose teaching profession of inner reason (their own will) ($\bar{X}$=44.35) had higher motivation than those who preferred the teaching profession for external reasons (family will, job guarantee, salary etc.) ($\bar{X}$=37.96). These findings reveal that teachers' motivation can differ significantly according to gender, education level and reason for choosing teaching profession.

In Table 4 below, the findings for the Independent Samples t-Test conducted to determine whether the levels of teachers' participation in professional development activities differ significantly according to the variables of gender, branch, education level and reason for choosing teaching profession.

Table 4. Findings for the Independent Samples t-Test conducted to examine the total scores of teachers' participation levels in professional development activities according to the variables of gender, branch, education level and reason for choosing teaching profession

Variable	Group	N	$\bar{X}$	ss	sd	t	p
Gender	Female	265	114.42	14.82	386	1.964	.050
	Male	123	111.13	16.44			
Branch	Class Teacher	161	114.14	15.06	386	.818	.414
	Branch Teacher	227	112.84	15.66			
Education Level	Undergraduate	308	113.06	15.42	386	-.781	.435
	Postgraduate	80	114.58	15.38			
Reason for Choosing Teaching Profession	Inner (My own will)	304	114.52	14.73	386	2.806	.005*
	External (Family will, job guarantee, salary etc.)	84	109.24	17.11			

*p<0.05

When Table 4 above is examined, it is seen that the total score means of the teachers' participation levels in professional development activities do not demonstrate a significant difference according to the variables of gender, branch and education level (p>.05). However, it was found that the total score mean of teachers' participation in professional development activities demonstrated a significant difference according to the variable of reason for choosing teaching profession [t(386)= 2.806, p<.05]. In this context, it was revealed that teachers who chose teaching profession of inner reason (their own will) ($\bar{X}$=114.52) had higher levels of participation in professional development activities than those who chose teaching profession for external reasons (family will, job guarantee, salary etc.) ($\bar{X}$=109.24). This finding reveals that

teachers' participation in professional development activities can differ significantly depending on the reason for choosing teaching profession.

In Table 5 below, the findings of the Simple Linear Correlation Analysis conducted in order to examine the relations between teachers' motivation, dimensions of motivation and their participation in professional development activities are given.

Table 5. Findings on the relations between teachers' motivation, dimensions related to motivation and their participation in professional development activities

	Identified Regulation	Intrinsic Motivation	Introjected Regulation	External Regulation	Motivation
Professional Reading	.241**	.251**	.231**	.059	.282**
Updating	.318**	.215**	.249**	.051	.295**
Experience	.333**	.223**	.251**	-.011	.285**
Reflection	.394**	.292**	.316**	.052	.376**
Sharing	.312**	.211**	.268**	.011	.288**
Cooperation	.288**	.256**	.213**	.081	.296**
Professional Development Activities	.405**	.314**	.327**	.060	.394**

**: significant at .01 level, p<.01

According to Table 5 above, it is seen that there is a moderate level, positive and significant relation between the total scores of teachers' motivation and the total scores of their participation in professional development activities (r=.394, p<.01). Besides, it is seen that the highest relation with professional development activities is in the identified regulation dimension of motivation (r=.405, p<.01). Additionally, the highest correlation between the total scores of the dimensions of professional development activities and the dimensions of motivation is between reflection and identified regulation (r=.394, p<.01). Finally, it was determined that the highest correlation with motivation was in reflection (r=.376, p<.01) and the lowest relation was in professional reading (r=.282, p<.01) dimensions of professional development activities.

Discussion, Conclusion and Suggestions

The following results were obtained in this study, in which teachers' levels of motivation and participation in professional development activities were investigated: In the study, it was determined that teachers' motivation levels were high ($\overline{X}$=42.96). This result is attributed to the fact that high scores obtained from Motivation Scale demonstrated the level of motivation also increased. As a matter of fact, in the research conducted by Cantaş and Kavas (2015) on teachers working in secondary schools, it was determined that the general motivation levels of teachers were high. Sarı, Canoğulları, and Yıldız (2018) found high levels of motivation of teachers in their research on teachers working in Adana. Urhan (2018) reached a conclusion in her research she conducted in Konya that the general motivation levels of teachers were high. In the study of Taşkesen, Taşkesen, Bakırhan, and Tanoğlu (2018), it was determined that teachers' motivation levels were at a level meeting expectations. In the research conducted by Yılmaz (2017) in Istanbul, it was determined that the work motivation of teachers was low, and the motivation of teachers was at a moderate level in the research conducted by Ugar (2019) again in Istanbul. Barlı, Bilgili, Çelik, and Bayrakçeken (2005), on the other hand, concluded in their research on teachers working in Erzurum that teachers' motivation was low in general. According to these differences in the results, it can be stated that teacher motivation can vary according to the region worked.

In the study, it was determined that the motivation levels of the teachers differed significantly according to the variables of gender, education level and reason for choosing teaching profession, yet it did not differ significantly according to the branch variable. In the study, it was revealed that female teachers had higher motivation than male teachers, those with a bachelor's degree had higher motivation than those with a master's degree and those who chose teaching profession of inner reason (their own will) had higher motivation than those who preferred it for external reasons (family will, job guarantee, salary etc.). This finding reveals that teachers' motivation can differ significantly according to their gender, education level and reason for choosing teaching profession. However, in the study of Çevik and Köse (2017), it was revealed that motivation levels of teachers did not differ significantly according to the variables of gender and education level. In the same study, it was concluded that motivation levels of classroom teachers and branch teachers did not differ significantly from each other, similar to the present study. It was determined that teachers' motivation levels in the research of Sarı et al. (2018), Taşkesen et al. (2018) and Urhan (2018), and teachers' work motivation in the study of Yılmaz (2017) did not differ significantly according to gender. In the study of Ugar carrying out the evaluation according to intrinsic and extrinsic motivation, which are sub-dimensions of motivation, it was found that both motivations of teachers did not differ significantly according to gender. When examined in terms of the branch variable, Urhan (2018) found in her study that the level of motivation did not differ significantly between classroom and branch teachers. Ugar (2019) also examined motivation in terms of the type of school worked and revealed that there was no significant difference according to teachers' working in primary and secondary schools and high schools. Similarly, Can (2015) found in his study that teachers' motivation levels did not differ in terms of school type. In other words, it was determined that there were no significant differences in intrinsic and extrinsic motivation between branch and classroom teachers. When evaluated in terms of education level, contrary to the present study, in Ugar's (2019) research it was determined that the motivation levels of teachers did not appear as a significant difference in those with undergraduate and graduate degrees. In this regard, it can be

stated that according to the sample group studied, teachers' motivation levels can differ from each other in terms of aforementioned variables.

Another result of the study is that teachers' participation levels in professional development activities are high ($\bar{X}$=113.38). High scores obtained from the Professional Development Activities Scale for Teachers, which was used as a data collection tool in the study, indicate that teachers' participation levels in professional development activities are high. Similarly, Eroğlu and Özbek (2018b), who worked with 452 teachers during the development stage of the scale, found that teachers' perceptions of professional development activities were high. In the study of Aslanargun and Atmaca (2017), it was determined that the majority of teachers participated in some seminars, training and programs related to their branches in order to improve themselves professionally. In the study of Kaçan (2004), it was concluded that most of the teachers made an effort to participate in professional development activities. The results of the studies indicate that teachers' perspectives on professional development are positive, and accordingly, they are willing to participate in professional development activities.

In the study, it was determined that teachers' participation levels in professional development activities did not differ significantly according to the variables of gender, branch and education level. In a similar vein, in the study of Kasalak (2020), the number and duration of participating in professional development activities and the level of being affected by the activities of the teachers who work as school administrators did not differ according to the gender variable. In the study of Kaçan (2004) on classroom teachers, it was concluded that the effort to participate in professional development activities did not differ significantly according to gender variable. According to these results, it can be expressed that gender is not a determining factor in participating in professional development activities. In the study of Kasalak (2020), it was concluded that the number and duration of participation in professional development activities and the level of being affected by the activities of the teachers who are school administrators differ significantly according to the type of school worked. As a matter of fact, when it is taken into consideration that class teachers are appointed as administrators in primary schools and branch teachers are appointed as administrators in secondary and high schools, this variable can also be associated with the branch variable of the present study. In this context, considering the results of the research of Kasalak (2020), it is seen that school administrators working in primary schools participated in professional development activities more than those working in high schools, and school administrators working in high schools participate in professional development activities in longer durations than those working in primary and secondary schools and find these activities more effective. Accordingly, this result can be evaluated in a sense that teachers' perceptions towards professional development activities may differ according to their branch. Another result of the present study is that the levels of teachers' participation in professional development activities differed significantly in favour of those choosing teaching profession of inner reason (their own will). This result can be evaluated in a way that those who choose teaching profession of their own will have higher levels of professional commitment and participate more in professional development activities to ensure their professional development. In the study by Kaçan (2004), on the other hand, it was concluded that the effort to participate in professional development activities did not differ significantly according to the variable of reason for choosing the profession. It can be stated that this difference can result from both the branch of the sample groups and the regions where the application was conducted.

Finally, in the present study, a moderate level, positive and significant relation was determined between teachers' levels of motivation and participation in professional development activities (r=.394, p<.01). Accordingly, it can be evaluated in a sense that as teachers' motivation increases, they participate more in professional development activities, or on the contrary, as they participate in professional development activities, their motivation increases in the same way. This result supports the opinion of Buldu (2014), supporting teachers by determining their professional needs at all stages of their professional career, providing them with professional development opportunities in the field they need, and rewarding them as much as they succeed will positively affect teachers' motivations and performances. Can (2019) also evaluates the lack of motivation in teachers as one of the barriers to professional development. In addition, as Murphy and Calway (2008) stated, professional development practices in the form of work-integrated learning increase the professional commitment and motivation of employees. In another study conducted on preservice teachers, Bayır and Köseoğlu (2013) determined that prospective teachers participating in the professional development workshop developed some new understandings about their roles as teachers in the classroom and that they switched from traditional teacher role to a constructive teacher role. Besides, it was determined that teacher candidates gained an awareness about implementing the requirements of that role gained when they started their profession in the future. In other words, it can be expressed that the role gained through professional development activities provided motivation for the profession. In a study conducted by Gokmenoglu, Beyazova, and Kılıçoğlu (2015) on academic staff working at university, it was stated that motivation increase was among the gains of professional development activities as a result of the interviews. In addition, in the present study, it was determined that the highest relation with teachers' perceptions towards professional development activities was in the identified regulation dimension of motivation and there was no significant relation with external regulation. In fact, Deci and Ryan (1985, 1991) consider identified motivation as the choices made by the individual by being aware of the importance of a task and making decisions accordingly (as cited in Bozgün, and Akın-Kösterelioğlu, 2020). The fact that teachers' motivation levels are in favour of those choosing teaching profession of their own will is thought to support this and it can be considered as functional in forming a positive perception towards professional development activities. Additionally, it is seen that the majority of the participant teachers of the study preferred teaching profession on their own will. In this regard, it can be thought that motivation associated with identified regulation is related to the high perception towards professional development activities. Indeed, as İşcan (2006) stated, the identification of the employees in an organization with the organization makes the work performed more meaningful, increases the motivation of employees, and enables them to make some voluntary efforts to support the organization willingly. On the other hand, in another study, it was concluded that organizational cynicism decreased as the organizational identification of teachers increased. In addition, in the study, it was emphasized that with the increase in organizational identification of teachers, they would adopt the goals of the school and make intense efforts accordingly, integrate with the school, and share both success and failure (Argon and Ekinci, 2016). With reference to the same idea, it is thought that with the increase in identification, teachers will be able to adopt the profession, fulfil the requirements of it, integrate with it and participate in professional development activities or develop a positive perception towards these activities.

Based on the results obtained from the research, the following suggestions can be offered:

Secondary school students thinking of choosing faculty of education can be guided for an appropriate professional orientation. Criteria can be introduced to ensure that people who are committed and willing to the teaching profession are appointed as teachers. In order to increase the participation in professional development activities, practices increasing the motivation of teachers can be prepared by school administrations. Ministry of National Education (MoNE) can diversify professional development activities in line with teachers' general educational needs. MoNE can implement encouraging activities that will enable teachers to participate voluntarily in professional development activities. In order to increase the motivation of teachers completing postgraduate education, various improvements (career steps, service score, management score, additional course fee increase, etc.) can be made. Qualitative studies can be conducted to reveal the difference in motivation of teachers according to gender.

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