



The Relationship Between Primary School Teachers' Work Motivation and their Levels of Professional Innovativeness

ABSTRACT

This research explores how primary school teachers' work motivation is associated with their degree of professional innovativeness. Adopting a correlational survey approach, data were gathered from 376 primary school teachers employed in Antakya, Hatay during the 2019–2020 academic year. The dataset was processed using statistical software. To assess the distribution pattern of the data, the Kolmogorov-smirnov test was employed. As the results indicated a deviation from normality ($p < 0.05$), non-parametric statistical techniques were utilized. The Mann-whitney U test was applied to evaluate differences in work motivation and innovativeness based on gender, while the Kruskal-wallis H test was used for age and educational qualification comparisons. In cases where significant group differences were identified, the Mann-whitney U test was used for pairwise comparisons. To analyze the relationship between the main variables, the Spearman Brown correlation coefficient was computed. Additionally, multiple linear regression analysis was performed to assess how well work motivation predicts professional innovativeness. The analysis revealed a statistically significant and positive correlation between teachers' work motivation and their innovativeness. It was also found that both variables varied significantly across gender, age, and educational levels. These outcomes underscore the significance of addressing both work-related motivational and professional aspects in the pursuit of educational innovation.

Keywords: Primary School Teachers, Work Motivation, Professional Innovativeness

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INTRODUCTION

Modern organizations face two paramount challenges: optimizing efficiency and ensuring effectiveness. To thrive in an increasingly competitive global environment, firms must leverage their workforce strategically to advance organizational objectives (Tuncer, 2013). The motivation of individuals plays a significant role in achieving organizational objectives. In other words, the level of motivation among employees directly affects their productivity. Workers exhibiting strong motivation typically report elevated satisfaction levels and actively cultivate healthier workplace dynamics (Demirtas et al., 2019). Within organizational behavior scholarship, motivation characterized as an internal force that propels individuals toward specific behavioral outcomes has been extensively researched (Orucu & Kanbur, 2008). Motivated individuals perform their tasks voluntarily rather than out of obligation. In contrast, individuals with amotivation perceive assigned duties as compulsory, which negatively impacts their productivity (Adair, 2003).

Motivation, which ensures that individuals work effectively and efficiently (Orucu & Kanbur, 2008), is considered one of the key resources for organizational success (Tuncer, 2011). Findikci (2000:373) characterizes motivation as a psychological impetus that both energizes human agency and steers behavioral orientation, manifesting inner drivers such as needs, aspirations, fears, and belief systems. It involves a combination of intrinsic and extrinsic elements that influence, shape, and maintain individuals' behavior over time (Akbaba, 2006). Amos and Grace (2016) describe motivation as an internal process that drives individuals toward a goal. According to another definition, motivation results from the interaction between internal and external conditions. All such factors that lead to an individual toward a goal constitute the process of motivation (Bursalioglu, 2019). Motivation inherently stems from personal needs successful stewardship is contingent upon addressing these foundational demands.

The success of developments in educational organizations is closely linked to teachers' adoption of positive attitudes and behaviors. Therefore, increasing the efficiency and effectiveness of teachers—who are key actors in educational organizations—and motivating them to work is of great importance (Unal, 2000). Teachers' effectiveness in carrying out their duties may be closely linked to their level of work motivation. Work motivation, which directly affects employees' efficiency and job performance, is defined as the type of motivation that drives individuals in the workplace (Civilidag & Sekercioglu, 2017). It is well established that work motivation significantly impacts the quality of work performed by employees (Ertan, 2008). Teachers' levels of work motivation play a crucial role in shaping their positive attitudes and behaviors toward both the school and the students (Arik, 2016). High levels of teacher motivation contribute not only to increased work satisfaction and performance but also to enhanced

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organizational productivity. Furthermore, highly motivated teachers are likely to positively influence student success (Akbaba, 2006; Recepoglu, 2013).

In general, theories of motivation propose that the driving forces behind individuals' actions originate from either internal or external sources. These sources collectively contribute to individuals' ability to attain and maintain success. In organizational and managerial contexts, motivation is considered closely related to performance (Akpola & Oguz, 2022). The intrinsic motivation paradigm suggests workers derive drive from perceiving their tasks as purposeful and gratifying. Such employees organically synchronize personal aspirations with organizational aims while developing a sense of security and worth. Here, organizational culture functions as a critical catalyst. A well-established organizational culture can instill a sense of identity and commitment in employees, motivate them to view themselves as competent and successful individuals, and strengthen their feeling of inclusion within the workplace (George & Sabhapathy, 2014). A study by Deniz (2021) identified internal factors that enhance teacher motivation, including love for the profession, the desire to help students develop, responsibility, conscience, ideals, psychological well-being, a sense of professional competence, and the drive to succeed. The same study also identified external factors such as in-school interaction, financial situation, recognition, student achievement, democratic management, physical school conditions, discipline policies, mutual trust among teachers, respect, and social activities.

Recent studies on teacher motivation have highlighted its significant connection with factors like student engagement, instructional methods, educational change efforts, and teachers' psychological well-being and job satisfaction (Jiying & Hongbiao, 2016). Studies in the literature have examined the relationship between teacher motivation levels and school administrators' leadership behaviors (Mutlu, 2019; Ozmen, 2017;), social communication skills (Dogan & Kocak, 2014), work characteristics (Barnabé & Burns, 1994), school culture (Demirtas et al., 2019; Tanriverdi, 2007; Yilmaz, 2009), change management (Dalkiran, 2018), psychological climate in schools (Eroglu, 2018), structural and psychological empowerment (İhtiyaroglu, 2017), transformational leadership, work motivation, and teacher performance (Andriani et al., 2018), and organizational health (Guclu et al., 2014).

There is a known positive relationship between high motivation levels, work compatibility, and the tendency to exhibit innovative behaviors (Dorner, 2012). Highly motivated individuals are more inclined to generate effective and creative ideas due to their psychological well-being. Organizations expect to obtain the innovative ideas and actions they need from motivated employees (Gezer, 2019). Learning-conducive environments heighten the proactivity and ideation efficacy of intrinsically driven personnel (Gurkan & Demiralay, 2017). This evidence positions motivation as a fundamental precursor to innovative conduct. Consequently, organizations possessing highly engaged workforces are poised to pioneer innovation implementation. Innovation involves developing a new product or improving an existing condition. However, innovation requires certain conditions and a period of time (Kurtoglu, 2019). Innovation can be described as an umbrella term encompassing risk-taking, creativity, openness to experience, and thought leadership (Kilicer & Odabasi, 2010). Innovation can be considered in both individual and collective dimensions. In the first, it emerges from the creativity of an individual; in the second, it results from collective efforts, interaction, and synergy among individuals (Yahyagil, 2001). Whether innovation emerges individually or collectively may depend on individuals' tendencies toward innovation. These tendencies may stem from inherent needs for stimulation, the desire for novelty, autonomy in decision-making, and a need for uniqueness (Roehrich, 2004).

Teachers are responsible for implementing innovation policies in schools. For teachers to adopt and implement innovations, they must possess certain innovative characteristics. An innovative organizational climate is essential for fostering such characteristics. An innovative climate reflects the attitudes, beliefs, and assumptions of organizational members toward new ideas and practices (Chou et al., 2019). In educational environments where innovation is encouraged and failure is not penalized teachers are more likely to develop innovative behaviors and take risks. Additionally, organizations that foster collaborative work environments and strong peer support are expected to be more conducive to innovation (Huisheger et al., 2009). Teachers' tendencies toward innovation depend not only on the innovative climate of the school but also on individual characteristics. The development or adoption of innovations by teachers is believed to be related to their prior experiences, personal traits, willingness to change, and level of social participation. Intrinsic motivation is considered a determining factor in the adoption of innovative practices by organizational members. Intrinsic motivation refers to an internal inclination toward enhancing one's capabilities and exploring new ideas (Fidan & Ozturk, 2015). Creative thinking, the first step in innovation, is fueled by intrinsic motivation, as cognitive flexibility and complex solutions can only emerge through strong motivation (Amabile, 1993). This highlights the crucial role of intrinsic motivation, which underlies work motivation, in the development of innovative ideas among teachers.

The attitudes of primary school teachers toward innovation and their motivation levels play a critical role in improving educational quality. It can be asserted that primary school teachers' motivation levels contribute to the

implementation of innovative practices. Teachers with heightened motivation often pioneer innovative practice diffusion in schools. By examining linkages between primary educators' job motivation and innovation proficiency, this study could stimulate innovation cultures and school efficiency. Existing literature shows insufficient exploration of this interrelationship, warranting deeper examination. This study aims to investigate the interplay between teachers' occupational motivation and professional innovation capacity through the following research questions:

- ✓ What magnitude of work motivation and professional innovativeness manifests among primary school educators?
- ✓ How do gender, seniority and educational attainment affect teachers' motivationn inovativeness profiles?
- ✓ Does a statistically significant correlation exist between teachers' work motivation and innovativeness metrics?

RESEARCH DESIGN

Study Population and Sample

Employing a quantitative relational survey design, this study examines the association between primary school teachers' work motivation and professional innovation capacity.

The study population comprised 1,759 primary school teachers employed in public primary schools across antakya district, hatay province during the 2020-2021 academic year. A sample of 307 teachers was selected through convenience sampling. Participants included 102 male (33.2%) and 205 female (66.8%) educators. The ages of the participating teachers ranged from 20 to 65. Accordingly, 101 (32.9%) were between 20 and 30 years old, 116 (37.8%) between 31 and 40, 39 (12.7%) between 41 and 50, and 51 (16.6%) between 51 and 65 years of age. Considering the professional seniorlty of the teachers, 119 (38.8%) had between 1 and 10 years, 78 (25.4%) between 11 and 20 years, and 110 (35.8%) had 21 years or more of experience. When the duration of service at the same school is considered, 188 (61.2%) had worked 1–5 years, 69 (22.5%) for 6–10 years, 24 (7.8%) for 11–15 years, and 26 (8.5%) for 16 years or more. Furthermore, 33 (10.7%) of the teachers were graduates of vocational schools, 253 (82.4%) held a bachelor's degree, and 21 (6.8%) held a master's degree.

Data Collection

In order to collect the necessary data for this study, the “multidimensional work motivation scale” developed by Gagné et al. (2010) and adapted into turkish by Civilidag and Sekercioglu (2017), and the “professional innovativeness scale for primary school teachers” developed by Altintas Yuksel (2019) we used.

Multidimensional Work Motivation Scale

The multidimensional work motivation scale was developed by Gagné et al. (2010). It was adapted into turkish and validated by Civilidag and Sekercioglu (2017). The scale consists of six sub-dimensions and 19 Items: “self-regulation,” “external regulation–material,” “external regulation–social,” “amotivation,” “introjected regulation,” and “intrinsic motivation.” It is designed on a 5-point likert scale, and participants are expected to respond to the statements using one of the following options: 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, 5 = strongly agree. The confirmatory factor analysis of the scale was conducted by civilidag and sekercioglu (2017). The model fit indices were determined as $\chi^2(119) = 330.07$, $p = .000$, $\chi^2/df = 2.77$, $rmsea = .059$, $gfi = .93$, $agfi = .90$, $srmr = .59$, and $cfi = .96$. Within the scope of the reliability study, cronbach's alpha reliabilty coefficients were calculated for the total scale and sub-dimensions. In this study, the cronbach's alpha value for the total scale was found to be .72. The cronbach's alpha values for the sub-dimensions were as follows: .62 for “amotivation,” .76 for “intrinsic motivation,” .77 for “external regulation–social,” .71 for “self-regulation,” .67 for “external regulation–material,” and .69 for “introjected regulation.”

Professional Innovativeness Scale for Primary School Teachers

This scale was developed by Altintas Yuksel (2019). It consists of three dimensions and 52 items: “innovativeness in learning,” “professional innovativeness,” and “resistance to innovation.” It is structured as a 5-point likert scale, and participants are expected to respond to the items with one of the following options: 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree, and 5 = strongly agree. The factor loadings of the items in the professional innovativeness scale for primary school teachers range between .412 and .715. In this study, the cronbach's alpha coefficient was found to be .92 for the “innovativeness in learning” sub-dimension, .85 for the “professional innovativeness” sub-dimension, .88 for the “resistance to innovation” sub-dimension, and .88 for the entire scale.

Data Analysis

Statistical analyses were used. Bivariate relationships were examined using pearson product-moment correlation, while predictive capacities of variables were assessed through multiple linear regression. Prior to scale analysis,

normality distribution was evaluated via kolmogorov-smirnov testing—appropriate for samples exceeding $n=50$ (Buyukozturk et al., 2019). For both the multidimensional work motivation scale and professional innovativeness scale sub-dimensions, p-values fell below the .05 threshold ($p < .05$), confirming non-normality. Consequently, non-parametric analyses were implemented throughout the study.

Descriptive statistics (mean scores, standard deviations) were computed for all sub-dimensions of the multidimensional work motivation scale and professional innovativeness scale. To assess gender-based differences in motivation and innovativeness levels (Two categorical groups), the mann-whitney u test was implemented. For age cohorts and education-level comparisons (≥ 3 groups), the kruskal-wallis h test was employed. Following significant kruskal-wallis results, post-hoc pairwise mann-whitney u tests identified differential groups. Relationships between variables were quantified using spearman's rho correlation coefficients.

FINDING

The arithmetic means and standard deviations regarding primary school teachers' work motivation levels are presented in table 1.

Table 1: Work Motivation Levels of Primary School Teachers (N = 307)

Variables	\bar{X}	S
Amotivation	1.46	.71
Intrinsic Motivation	3.49	1.05
External Regulation Social	1.88	.99
Identified Regulation	4.32	.85
External Regulation Material	2.02	.90
Introjected Regulation	4.12	.88
Work Motivation	2.88	.46

When table 1 is examined, it is observed that among the sub-dimensions of work motivation, primary school teachers scored the highest in the *identified regulation* sub-dimension ($\bar{x} = 4.32$) and the lowest in the *amotivations* sub-dimension ($\bar{x} = 1.46$). It can be stated that the overall work motivation level of the participating primary school teachers is at a *moderate* level ($\bar{x} = 2.88$).

The arithmetic means and standard deviations regarding primary school teachers' professional innovativeness levels are presented in table 2.

Table 2: Professional Innovativeness Levels of Primary School Teachers (N = 307)

Variables	\bar{X}	S
Innovative In Learning	4.46	.51
Innovative In Occupation	4.03	.59
Resistance To Innovation	3.31	.87
Professional Innovation	3.72	.42

When table 2 is examined, it is observed that teachers have a very high perception regarding the *innovative in learning* sub-dimension ($\bar{x} = 4.46$), while their perception of the *resistance to innovation* sub-dimension is found to be at a moderate level ($\bar{x} = 3.31$). It can be stated that the professional innovativeness perception of the participating primary school teachers is at a *high* level ($\bar{x} = 3.72$).

The results of the mann-whitney u test conducted to determine whether the work motivation of primary school teachers differs by gender are presented in table 3.

Table 3: Comparison of Primary School Teachers Work Motivation Scores In Terms of Gender Variable, Mann-Whitney U Test Results

	Gender	N	Rank Mean	Rank Total	U	P
Amotivation	Male	102	153.53	15660.0	10407.0	.942
	Female	205	154.23	31618.0		
Intrinsic Motivation	Male	102	155.17	15827.0	10336.0	.870
	Female	205	153.42	31451.0		
External Regulation Social	Male	102	157.82	16098.0	10065.0	.582
	Female	205	152.10	31180.0		
Identified Regulation	Male	102	142.32	14517.0	9264.0	.092
	Female	205	159.81	32761.0		
External Regulation Material	Male	102	161.08	16430.0	9733.0	.319
	Female	205	150.48	30848.0		
Introjected Regulation	Male	102	153.91	15699.0	10446.0	.990
	Female	205	154.04	31579.0		
Work Motivation Total	Male	102	155.92	15903.5	10259.5	.789
	Female	205	153.05	31374.5		

When table 3 is examined, it is observed that none of the sub-dimensions—*amotivation* ($u = 0407.0$, $p > .05$), *intrinsic motivation* ($u = 10336.0$, $p > .05$), *external regulation - social* ($u = 10065.0$, $p > .05$), *identified regulation* ($u = 9264.0$, $p > .05$), *external regulation - material* ($u = 9733.0$, $p > .05$), and *introjected regulation* ($u = 10446.0$, $p > .05$), as well as the *overall work motivation score* ($u = 10259.5$, $p > .05$) show a statistically significant difference according to gender.

The results of the kruskal-wallis h test conducted to determine whether work motivation differs according to age are presented in table 4.

Table 4: Kruskal-Wallis-H Test Results of Primary School Teachers Work Motivation Scores According to Age Variable

	Age	N	Rank mean	Sd	X ²	P	Difference
Amotivation	20-30	101	156.58	3	1.975	.578	
	31-40	116	146.12				
	41-50	39	161.01				
	51-65	51	161.45				
Intrinsic Motivation	20-30	101	157.31	3	1.990	.574	
	31-40	116	155.30				
	41-50	39	135.63				
	51-65	51	158.53				
External Regulation Social	20-30	101	142.51	3	5.378	.146	
	31-40	116	153.40				
	41-50	39	179.44				
	51-65	51	158.67				
Identified Regulation	20-30	101	163.40	3	3.405	.333	
	31-40	116	153.07				
	41-50	39	133.79				
	51-65	51	152.96				
External Regulation Material	20-30	101	152.97	3	2.759	.430	
	31-40	116	153.53				
	41-50	39	173.18				
	51-65	51	142.45				
Introjected Regulation	20-30	101	147.93	3	2.652	.448	
	31-40	116	160.87				
	41-50	39	139.54				
	51-65	51	161.47				
Work Motivation Total	20-30	101	154.35	3	.223	.974	
	31-40	116	151.60				
	41-50	39	159.17				
	51-65	51	154.82				

As seen in table 4, no statistically significant difference was found in any of the sub-dimensions—*amotivation* [$\chi^2(3) = 1.975$, $p > .05$], *intrinsic motivation* [$\chi^2(3) = 1.990$, $p > .05$], *external regulation - social* [$\chi^2(3) = 5.378$, $p > .05$], *identified regulation* [$\chi^2(3) = 3.405$, $p > .05$], *external regulation - material* [$\chi^2(3) = 2.759$, $p > .05$], *introjected regulation* [$\chi^2(3) = 2.652$, $p > .05$], and *total work motivation* [$\chi^2(3) = .223$, $p > .05$] based on the age variable.

The results of the kruskal-wallis h test conducted to determine whether work motivation differs by educational level are presented in table 5.

Table 5: Kruskal-Wallis-H Test Results of Primary School Teachers Work Motivation Scores According to The Education Level Variable

	Seniority	N	Mean rank	Sd	X ²	P	Difference
Amotivation	Associate Degree	33	172.48	2	5.757	.056	-
	Bachelor's Degree	253	149.07				
	Master's Degree	21	184.38				
Intrinsic Motivation	Associate Degree	33	140.18	2	1.087	.581	-
	Bachelor's Degree	253	156.32				
	Master's Degree	21	147.79				
External Regulation Social	Associate Degree	33	174.89	2	6.287	.043	2-3
	Bachelor's Degree	253	148.45				
	Master's Degree	21	187.98				
Identified Regulation	Associate Degree	33	136.77	2	6.077	.048	2-3
	Bachelor's Degree	253	159.27				
	Master's Degree	21	117.62				
External Regulation Material	Associate Degree	33	148.53	2	4.381	.112	-
	Bachelor's Degree	253	151.51				
	Master's Degree	21	192.57				

Introjected Regulation	Associate Degree	33	140.48	2	1.963	.375	-
	Bachelor's Degree	253	157.20				
	Master's Degree	21	136.64				
Work Motivation Total	Associate Degree	33	150.83	2	.315	.854	-
	Bachelor's Degree	253	153.58				
	Master's Degree	21	164.0				

(1: associate degree, 2: bachelor's degree, 3: master's degree)

As seen in table 5, no significant differences were observed in the sub-dimensions of *amotivation*. [$\chi^2(2) = 5.757$, $p > .05$], *intrinsic motivation* [$\chi^2(2) = 1.087$, $p > .05$], *external regulation - material* [$\chi^2(2) = 4.381$, $p > .05$], *introjected regulation* [$\chi^2(2) = 1.963$, $p > .05$], and *total work motivation* [$\chi^2(2) = .315$, $p > .05$] based on education level. However, significant differences were found in the sub-dimensions *external regulation - social* [$\chi^2(2) = 6.287$, $p < .05$] and *identified regulation* [$\chi^2(2) = 6.077$, $p < .05$].

Specifically, teachers with a master's degree showed significantly higher scores in *external regulation - social* compared to those with a bachelor's degree (bachelor's mean rank = 148.45, master's mean rank = 187.98, $u = 1949.50$, $p < .05$). Conversely, those with a bachelor's degree had significantly higher *identified regulation* scores than those with a master's degree (bachelor's mean rank = 159.27, master's mean rank = 117.62, $u = 19439.0$, $p < .05$). In other words, teachers with a master's degree place less emphasis on identified regulation and are more influenced by external stimuli in terms of motivation than those with only a bachelor's degree.

The results of the mann-whitney u test conducted to determine whether professional innovativeness differs by gender are presented in table 6.

Table 6: Comparison of Primary School Teachers Professional Innovation Levels in Terms Of Gender Variable Mann-Whitney U Test

	Gender	N	Rank Mean	Rank Total	U	P
Innovative in Learning	Male	102	149.38	15237.0	9984.0	.520
	Female	205	156.30	32041.0		
Innovative in Occupation	Male	102	144.56	14745.5	9492.5	.189
	Female	205	158.70	32532.5		
Resistance to Innovation	Male	102	180.16	18376.0	7787.0	.000
	Female	205	140.99	28902.0		
Professional Innovation Total	Male	102	130.33	13293.5	8040.5	.001
	Female	205	165.78	33984.5		

When table 6 is examined, female teachers had significantly lower mean scores in *resistance to innovation* (female mean rank = 140.99, male mean rank = 180.16, $u = 7787.0$, $p < .05$). This indicates that female teachers exhibit lower resistance to innovation compared to male teachers. Moreover, total scores for professional innovativeness were significantly higher for female teachers than for male teachers (female mean rank = 165.68, male mean rank = 130.33, $u = 8040.50$, $p < .05$). In other words, male teachers demonstrate higher resistance to innovation and lower levels of professional innovativeness compared to their female counterparts.

The results of the kruskal-wallis h test conducted to determine whether professional innovativeness levels differ according to age are presented in table 7.

Table 7: Kruskal-Wallis- H Test Results of Primary School Teachers Professional Innovation Level Scores According to Age Variable

	Age	N	Rank Mean	Sd	X ²	P	Difference
Innovative in Learning	20-30	101	173.95	3	9.557	.023	1-2
	31-40	116	146.45				
	41-50	39	127.17				1-3
	51-65	51	152.19				
Innovative in Occupation	20-30	101	167.92	3	7.781	.051	-
	31-40	116	156.98				
	41-50	39	124.58				
	51-65	51	142.36				
Resistance to Innovation	20-30	101	120.16	3	25.324	.00	1-2
	31-40	116	162.93				
	41-50	39	167.63				1-4
	51-65	51	190.28				
Professional Innovation Total	20-30	101	189.27	3	28.609	.00	1-2
	31-40	116	148.70				
	41-50	39	120.40				1-4
	51-65	51	121.91				

(1: 20–30 years, 2: 31–40 years, 3: 41–50 years, 4: 51–65 years)

Table 7 shows that there is no significant difference in the *innovative in profession* sub-dimension by age [$\chi^2(3) = 7.781, p > .05$]. However, significant differences were found in the *innovative in learning* [$\chi^2(3) = 9.557, p < .05$], *resistance to innovation* [$\chi^2(3) = 25.324, p < .05$], and *total professional innovativeness* [$\chi^2(3) = 28.609, p < .05$] dimensions. Specifically, teachers aged 20–30 scored significantly higher in overall professional innovativeness compared to those aged 31–40 (mean rank = 189.27 vs. 148.70, $u = 4209.0, p < .05$), 41–50 (mean rank = 189.27 vs. 120.40, $u = 1138.0, p < .05$), and 51–65 ($u = 1494.0, p < .05$). Additionally, teachers aged 31–40 scored higher than those aged 41–50 (mean rank = 148.70 vs. 120.40, $u = 2385.50, p < .05$). In the *innovative in learning* sub-dimension, teachers aged 20–30 scored significantly higher than those aged 31–40 (mean rank = 173.95 vs. 146.45, $u = 4791.0, p < .05$) and 41–50 (mean rank = 173.95 vs. 127.17, $u = 1359.0, p < .05$). In the *resistance to innovation* sub-dimension, teachers aged 20–30 had significantly lower scores compared to those aged 31–40 (mean rank = 120.16 vs. 162.93, $u = 4133.5, p < .05$), 41–50 (mean rank = 120.16 vs. 167.63, $u = 1361.0, p < .05$), and 51–65 (mean rank = 120.16 vs. 190.28, $u = 1490.50, p < .05$). This indicates teachers aged 20–30 exhibit significantly lower innovation resistance. Additionally, primary school teachers in the 31–40 age range demonstrated significantly lower mean scores than those aged 51–65 (2 row $\bar{x} = 163.93$, 4 row $\bar{x} = 190.28, u = 2378.0, p < .05$). In this case, it was found that primary school teachers in the 31–40 age range had significantly lower perceptions of resistance to innovation than their colleagues in the 51–65 age range.

The results of the kruskal-wallis-h test results of primary school teachers' professional innovativeness levels according to education level variable are presented in table 8.

Table 8: Results of Kruskal-Wallis-H Test on Professional Innovation Levels of Primary School Teachers According to Education Level Variable

		Seniority	N	Mean Rank	Sd	X ²	P	Difference
Innovative Learning	in	Associate Degree	33	161.97	2	.460	.794	
		Bachelor's Degree	253	152.42				
		Master's Degree	21	160.50				
Innovative Occupation	in	Associate Degree	33	169.29	2	7.513	.023	2-3
		Bachelor's Degree	253	148.25				
		Master's Degree	21	199.26				
Resistance Innovation	to	Associate Degree	33	166.76	2	.940	.625	
		Bachelor's Degree	253	151.82				
		Master's Degree	21	160.26				
Professional Innovation Total		Associate Degree	33	163.02	2	1.497	.473	
		Bachelor's Degree	253	151.28				
		Master's Degree	21	172.57				

1: associate degree, 2: bachelor's degree, 3: master's degree

Table 8 indicates no significant differences in primary school teachers' professional innovativeness levels by education level for: innovation in learning [$\chi^2(2) = .460, p > .05$], resistance to innovation [$\chi^2(2) = .940, p > .05$], and total innovativeness [$\chi^2(2) = 1.497, p > .05$]. However, significant differences emerge in the professional innovator dimension [$\chi^2(2) = 7.513, p < .05$].

Analysis of the professional innovativeness sub-dimension revealed that master's-degree graduates exhibited significantly higher innovativeness than bachelor's-degree graduates (bachelor's rank $\bar{x} = 148.25$, graduate rank $\bar{x} = 199.26, u = 1767.50, p < .05$). This indicates that advanced-degree holders demonstrate greater professional innovativeness than their bachelor's-level colleagues.

Correlation analysis to determine the relationship between teachers' work motivation and professional innovativeness levels was performed with spearman brown technique and the results obtained are presented in table 9.

Table 9: The Relationship Between of Primary School Teachers Multidimensional Work Motivation and Their Professional Innovation Levels

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Amotivation	-								
2. Intrinsic Motivation		-							
3. External Regulation Social			-						
4. Identified Regulation				-					
5. External Regulation Material					-				
6. Introjected Regulation						-			
7. Innovative in Learning							-		
8. Innovative in Occupation								-	
9. Resistance to Innovation									-

When table 9 is analysed, it is seen that there is a low level negative relationship between being amotivation and innovativeness in learning ($r = -.143$, $p < .01$); a low level positive relationship between intrinsic motivation and innovativeness in learning ($r = .187$, $p < .01$) and innovativeness in profession ($r = .151$, $p < .01$); a low level negative relationship between external regulation social and innovativeness in learning ($r = -.250$, $p < .01$) and innovativeness in profession ($r = -.144$, $p < .01$); a low level positive relationship between identified regulation and innovativeness in learning ($r = .263$, $p < .01$) and innovator in occupation ($r = .204$, $p < .01$); external regulation was positively correlated with material and innovator in learning ($r = -.144$, $p < .01$) and innovator in occupation ($r = -.118$, $p < .01$); there are low level positive significant relationships between internalised regulation and innovator in learning ($r = .256$, $p < .01$), innovator in profession ($r = .188$, $p < .01$) and resistance to innovation ($r = .124$, $p < .01$).

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between work motivation and professional innovativeness levels of primary school teachers. The research determined that teachers' perceptions of work motivation were at a moderate level. Considering the impact of teacher motivation on performance and productivity in educational institutions, this outcome elucidates the pivotal role of motivation in achieving institutional educational objectives. This finding aligns with existing literature on the subject (Avsar, 2014; Coban, 2019; Dur, 2014; Karaboga, 2007; Kurt, 2013; Memisoglu & Kalay, 2017; Sari, 2019; Zor, 2020).

The study further established that primary school teachers exhibited high levels of professional innovativeness. This indicates that teachers prioritize innovations in their field and closely monitor developments. Educators demonstrate a propensity for professional self-renewal and knowledge updating. Consequently, this may increase the speed of implementation and dissemination of educational innovations.

Analysis revealed no significant gender-based differences in primary school teachers' work motivation scores, indicating comparable motivation levels between male and female educators. Gender does not function as a determinant factor in teachers' occupational drive. This finding aligns with prior research (Arik, 2016; Avsar, 2014; Cansu, 2019; Canpolat, 2011; Emirbey, 2017; Eroglu, 2018; Nokay, 2019; Ozsoy, 2014; Ozmen, 2017; Tanriverdi, 2007; Ulas, 2008; Yilmaz, 2019).

Similarly, teachers' motivation levels showed no statistically significant variation across seniority brackets. This suggests professional tenure does not substantially influence motivational outcomes. These results corroborate existing studies (Avsar, 2014; Canpolat, 2011; Erturk, 2014).

Analysis revealed a statistically significant association between primary school teachers' educational attainment levels and their work motivation scores. Accordingly, it was found that primary school teachers with bachelor's and master's degrees had higher identified regulation scores than primary school teachers with associate degree. In addition, it was also found that teachers with bachelor's and master's degrees had higher external regulation social scores than teachers with master's degree. The items of the identified regulation sub-dimension are related to the effort shown to work. It is thought that master's degree graduates have to put great effort into their identified development in order to progress academically as well as the effort they put into their work. In this case, it is understandable that primary school teachers with bachelor's degree graduates' efforts at work are higher. In the study, it was concluded that the total work motivation scores of master's degree graduates were higher than their colleagues

with bachelor's and associate's degrees. Consistent with Deniz and Erdener (2016), Koprulu (2011), and Polat (2010), this study's evidence converges on similar motivational dynamics.

The study revealed a significant gender difference in professional innovativeness levels, with female primary school teachers demonstrating lower innovation resistance than their male counterparts ($p < .05$). This indicates male teachers exhibit stronger resistance to educational innovations. The reasons for this situation may be that male teachers are willing to protect the existing traditional structure, while female teachers want to change the existing order and are open to new learning and new practices. When the studies related to teachers' innovativeness levels are analysed in the related literature, different findings are reached regarding whether there is a difference according to gender. There are studies in which individual innovativeness levels of female teachers are higher (Gungor, 2019) and individual innovativeness levels of male teachers are higher (Sadic, 2019). However, certain studies diverge from these results, reporting no significant gender-based differences in teachers' individual innovativeness tendencies (Abbak, 2018; Kocasarac, 2018; Atli, 2019; Ozturk, 2015; Ozerbas & Kayabasi, 2019; Altintas Yuksel, 2019). The reason for the difference in the study results may be that the innovation culture in organisations differs according to educational institutions.

The study identified statistically significant differences between primary school teachers' seniority levels and both their innovation resistance sub-dimension and total professional innovativeness scores. Results indicate that teachers with 1-10 years of experience demonstrate higher professional innovativeness and lower innovation resistance than colleagues in higher seniority brackets. This is an indication that primary school teachers working in the first years of their profession are more open to innovations and show less resistance to innovations than their more experienced colleagues. At the same time, it can be stated that as the seniority increases, old and traditional ways are preferred instead of learning new information and trying new ways. In this case, it can be said that teachers' personal characteristics and their approaches to the profession also have an effect. These findings align with altintas Yuksel's (2019) research outcomes

The study determined a statistically significant difference between primary school teachers' education levels and their professional innovativeness sub-dimension scores. Accordingly, it is seen that the perceptions of professional innovativeness of primary school teachers who received master's level education are higher than their colleagues who completed their bachelor's degree education. This may be due to the fact that postgraduate education encourages individuals to think more analytically and critically. In addition, it can be said that teachers who receive postgraduate education closely follow the innovations in their profession and adopt innovative approaches. This finding of the study coincides with the results of the research conducted by Abbak (2018).

This study identified significant relationships between teachers' work motivation and professional innovativeness levels. Analysis revealed a weak negative correlation between primary school teachers' amotivation and their perceived innovativeness in learning contexts. This situation shows that teachers who cannot provide a high level of motivation in their profession do not have a positive perception towards new learning and innovative approaches in their branches. At the same time, it was concluded that teachers who have a high level of motivation in their profession have a more positive perception towards innovations. It is known that people with high work motivation have a high level of effective and creative thinking tendencies (Gezer, 2019). Although the factors affecting the level of motivation differ according to institutional cultures, it can be said that the motivation of teachers working in an institution open to innovations will also be high. In addition, if teachers do not love their profession enough and do not make extra effort in their work, it can be stated that their motivation is low. Therefore, it can be said that they may have a negative attitude towards innovations.

A weak positive and significant relationship was identified between primary school teachers' intrinsic motivation and their perceptions of innovation in learning and innovation in profession. This situation shows that the professional innovativeness tendencies of teachers who have intrinsic motivation are also at a high level. It is known that it is necessary to have intrinsic motivation in order to have individual innovation characteristics (Gundogdu Ozel, 2018). It can be said that teachers with high work motivation are open to new learning, have a developed sense of curiosity towards innovations and closely follow the innovations in their profession. At the same time, considering that learning takes place under the influence of an intrinsic power, it can be said that the same intrinsic power is also effective in showing innovative characteristics. In this case, teachers with high work motivation are also expected to have developed professional innovativeness.

A weak negative significant relationship was observed between primary school teachers' perceptions of external regulation social motivation and their perceptions of innovativeness in learning and innovativeness in profession sub-dimensions. It was concluded that teachers who regulate their behaviours due to social factors and change their behaviours according to external factors are not open to new learning and are not willing to follow the innovations

in their branches. Choosing the profession by being influenced by environmental factors causes the person not to reach professional satisfaction and therefore to fail in the profession (Kirag, 2015). It can be said that teachers who attach importance to getting the approval of the environment and consider external elements as a source of motivation are not interested in new learning environments and innovative practices in their profession. This situation reveals the importance of intrinsic motivation sources in developing behaviours for learning and designing innovative practices in education.

It was observed that there was a low level positive relationship between primary school teachers' self-regulation motivation and their perceptions of innovative in learning and innovative in profession sub-dimensions. Self-regulation sub-dimension items are related to giving importance to work, seeing your work as valuable and attributing a special meaning to your work. An individual can develop a sense of satisfaction towards his/her work and increase his/her performance with the effect of his/her own creativity and innovativeness without the need for external motivation factors. At the same time, it can be said that teachers who see their profession as important, value their profession and think that it has a special meaning for them are more likely to develop innovative behaviours and new learning and take steps in this direction.

It was observed that there was a low level negative correlation between primary school teachers' perceptions of external regulation material sub-dimension and innovative in learning and innovative in profession sub-dimensions. This shows that teachers' innovative behaviour development is negatively affected by external rewards and punishments. Among the factors that help the emergence of innovative ideas, taking measures to increase the motivation level of employees and making arrangements for the needs and desires of employees have an important place (Eren, Yucel, & Eren, 2010). In this context, it is thought that considering the well-being of teachers and implementing practices to increase the working comfort of teachers rather than economic reward or punishment practices will increase innovative teacher behaviours in schools.

It was observed that there was a low level positive relationship between primary school teachers' perceptions of internalised regulation and their perceptions of innovation in learning, professional innovativeness and resistance to innovation sub-dimensions. Introjected regulation is a type of external motivation and can cause guilt and anxiety in the person because of fear or fear of reactions from the environment (Goksel & Ayan, 2020). For this reason, it can be said that primary school teachers show innovative behaviours in order to avoid embarrassment and bad feelings towards their environment when they do not do their work well and to make them proud of themselves when they do their work well. At the same time, it can be added that the negative reactions of the employees in the school also negatively affect the tendency of the individual to show innovativeness characteristics. In this context, it can be mentioned that there is a relationship between environmental factors' perspectives on innovation and teachers' attitudes towards innovation. People can develop the processes of internalising and integrating behaviour only with internal motivation, otherwise, the person will feel pressure to exhibit the behaviour, because external motivation is also controlled motivation (Aslan & Dogan, 2020). From this point of view, it is possible to say that resistance to innovation may occur when teachers do not support external motivating factors with intrinsic motivating factors.

It is thought that employees who develop motivation towards their work will play a facilitating role in the development of an organisational culture that shows innovation and creativity characteristics (Unutkan, 1995). In an organisation where employees have low motivation, interpersonal relations weaken and adoption of innovations becomes difficult (Incir, 1998). Many researchers (Aksoy, 2006; Altok, 2009; Dalkiran, 2018; Keles, 2011; Loogma, Kruusval, & Umarik, 2012; Ulas, 2008) have stated that there is a positive relationship between employees' motivation levels and innovative ideas and the organisation's innovative initiatives. It is known that teachers working in institutions that do not follow current innovations experience low motivation (Kucuksayrac, 2013). Shanker, bhanugopan, Heijden, and Farrell (2017) stated in their research that the support of organisational culture for innovation will create a positive organisational climate and will also increase the motivation of employees. Gungor (2019), Oktug and Ozden (2013), Suharyati (2017), Yenice and Tunc (2019) found a positive relationship between teachers' innovativeness and motivation levels. It has been observed that teachers are more willing to try innovations and support their own development when they are highly motivated (Sari, 2019). Based on all this information, it can be stated that the source of work motivation has an important effect on the situation of showing professional innovativeness and exhibiting innovative behaviours. In today's world where technology is advancing at an untraceable speed every day, teachers who train individuals who will meet the needs of the age should develop innovativeness behaviours in order to guide them. Within the scope of these results, the following suggestions can be presented:

1. Teachers can be supported to participate in in-service trainings and workshops that will contribute to the development of innovation behaviours.

2. Each school can arrange individual and organisational changes that will contribute to teachers' work motivation and innovativeness according to the teachers working in their own school.
3. Researchers can conduct qualitative research to examine primary school teachers' perceptions of work motivation and professional innovativeness in depth.
4. Replication studies with varied sample groups—including different educational tiers and institutional contexts—are recommended to verify motivation-innovativeness dynamics
5. Researchers can examine the relationship between work satisfaction and proactive personality traits and occupational innovativeness.

REFERENCESS

- Abbak, Y. (2018). *An investigation of teachers' lifelong learning competencies and innovation levels*. [Unpublished master's thesis]. Erciyes University, Institute of Educational Sciences, Kayseri, Turkey.
- Ada, S., Akan, D., Ayık, A., Yıldırım, I., & Yalcın, S. (2013). Teachers' motivational factors. *Ataturk University Journal of Social Sciences Institute*, 17(3), 151–166.
- Adair, J. (2003). *Effective motivation: How do you get the best out of people?* Babıali Kultur.
- Akbaba, S. (2006). Motivation in education. *Kazım Karabekir Education Faculty Journal*, 13, 343–361.
- Aksoy, H. (2006). *The effect of organizational climate on motivation*. [Unpublished master's thesis]. Marmara University, Institute of Social Sciences, Istanbul, Turkey.
- Akpolat, T., & Oguz, E. (2022). Investigation of the relationships between teachers' perceived organizational trust, hope, and motivation levels. *Buca Faculty of Education Journal*, 53, 240–262. <https://doi.org/10.53411/deubefd.1020218>
- Altintas Yuksel, E. (2019). *Investigation of classroom teachers' professional innovation tendencies and attitudes towards the teaching profession*. [Unpublished doctoral dissertation]. Gazi University, Institute of Educational Sciences, Ankara, Turkey.
- Altok, T. (2009). *A comparative study on factors affecting employee motivation in service and manufacturing enterprises*. [Unpublished master's thesis]. Suleyman Demirel University, Institute of Social Sciences, Isparta, Turkey.
- Amabile, T. M. (1993). Motivational synergy: Toward new conceptualizations of intrinsic and extrinsic motivation in the workplace. *Human Resource Management Review*, 3(3), 185–201. [https://doi.org/10.1016/1053-4822\(93\)90012-S](https://doi.org/10.1016/1053-4822(93)90012-S)
- Amos, I., & Grace, L. (2016). Assessment of teacher motivation approaches in the less developed countries. *Journal of Education and Practice*, 6(22), 10–18. <https://files.eric.ed.gov/fulltext/EJ1079453.pdf>
- Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of the transformational leadership and work motivation on teachers performance. *International Journal of Scientific & Technology Research*, 7(7), 19–29.
- Arik, H. (2016). *Investigation of mobbing, anxiety, and work motivation levels of teachers working in private and public institutions* .. [Unpublished master's thesis]. Beykent University, Institute of Social Sciences, Istanbul, Turkey.
- Aslan, M., & Dogan, S. (2020). A theoretical perspective on the interaction of extrinsic motivation, intrinsic motivation and performance. *Vizyon Journal*, 11(26), 291–301.
- Atli, Y. (2019). *Investigation of the relationship between classroom teachers' individual innovation characteristics and their tendencies towards technology use in the classroom*. [Unpublished master's thesis]. Usak University, Institute of Social Sciences, Usak, Turkey.
- Avsar, F. (2014). *From a human resources perspective, opinions on factors affecting the work motivation of classroom teachers: An application in Cankaya district*. [Unpublished master's thesis]. Cankaya University, Institute of Social Sciences, Ankara, Turkey.
- Barnabé, C., & Burns, M. (1994). Teachers' job characteristics and motivation. *Educational Research*, 36(2), 171–185.
- Bursalioglu, Z. (2019). *New structure and behavior in school management* (20th ed.). Pegem Akademi.

- Buyukozturk, S., Cakmak, E. K., Akgun, O. E., Karadeniz, S., & Demirel, F. (2019). *Scientific research methods*. Pegem Akademi.
- Canpolat, C. (2011). *Relationships between teacher career step applications and teacher motivation and organizational commitment*. [Unpublished master's thesis]. Firat University, Institute of Educational Sciences, Elazığ, Turkey.
- Cansu, F. B. (2019). *Investigation of the effects of school administrators demonstrating innovative management characteristics on teachers' motivation and organizational commitment*. [Unpublished master's thesis]. Istanbul Aydın University, Institute of Social Sciences, Istanbul, Turkey.
- Chou, C. M., Shen, C. H., Hsiao, H. C., & Shen, T. C. (2019). Factors influencing teachers' innovative teaching behaviour with information and communication technology (ICT): The mediator role of organisational innovation climate. *Educational Psychology*, 39(1), 65–85. <https://doi.org/10.1080/01443410.2018.1520201>
- Civilidag, A., & Sekercioglu, G. (2017). Adaptation of the multidimensional work motivation scale to Turkish culture. *Mediterranean Journal of Humanities*, 7(1), 143–156.
- Coban, O. (2019). *Evaluation of teachers' motivation levels in terms of their views on professional development*. [Unpublished master's thesis]. Necmettin Erbakan University, Institute of Social Sciences, Konya, Turkey.
- Dalkiran, M. (2018). *The relationship between the 4+4+4 education system examined in terms of change management and teachers' work motivation (Balıkesir Province Sample)*. [Unpublished master's thesis]. Balıkesir University, Institute of Social Sciences, Balıkesir, Turkey.
- Demirtas, H., Aksoy, M., Balı, O., & Caglar, C. (2019). The effect of organizational culture on classroom teachers' motivation in primary schools. *Adıyaman University Journal of Social Sciences*, 11(31), 1–39. <https://dx.doi.org/10.14520/adyusbd.486990>
- Deniz, U. (2021). Rediscovering teacher motivational factors: Voices from the field. *Inonu University Journal of the Faculty of Education*, *22*(3), 2115–2139. <https://doi.org/10.17679/inuefd.963660>
- Deniz, U., & Erdener, M. A. (2016). Factors affecting teachers' work motivation. In O. K. Tufekci (Ed.), *Strategic research in social sciences* (pp. 29–41).
- Dogan, S., & Kocak, O. (2014). The relationship between school administrators' social communication skills and teachers' motivation levels. *Educational Administration: Theory and Practice*, 20(2), 191–216.
- Dorner, N. (2012). *Innovative work behavior: The roles of employee expectations and effects on job performance*. [Doctoral dissertation, University of St. Gallen]. Verlag nicht ermittelbar.
- Dur, B. İ. (2014). *High school teachers' motivation level and the relationship between motivation level and school culture*. [Unpublished master's thesis]. Istanbul Aydın University, Institute of Social Sciences, Istanbul, Turkey.
- Emirbey, A. R. (2017). *The relationship between school administrators' ethical leadership behaviors and teacher motivation*. [Unpublished master's thesis]. Usak University, Institute of Social Sciences, Usak, Turkey.
- Eren, M. S., Yucel, R., & Eren, S. S. (2010). Examining the relationships between environmental adversity, market dynamism, customer focus, and innovation within the scope of their effects on firm performance. *Yasar University Journal*, 18(5), 3102–3116.
- Eroglu, T. (2018). *The relationship between psychological climate and work motivation in schools*. [Unpublished master's thesis]. Eskisehir Osmangazi University, Institute of Educational Sciences, Eskisehir, Turkey.
- Ertan, H. (2008). *The relationship between organizational commitment, work motivation and job performance: A study in five-star hotel businesses in Antalya*. [Unpublished doctoral dissertation]. Afyon Kocatepe University, Institute of Social Sciences, Afyonkarahisar, Turkey.
- Erturk, R. (2014). *The relationship between teachers' work motivation and organizational commitment (Bolu Province Sample)*. [Unpublished master's thesis]. Abant İzzet Baysal University, Institute of Educational Sciences, Bolu, Turkey.
- Fidan, T., & Ozturk, İ. (2015). The relationship of the creativity of public and private school teachers to their intrinsic motivation and the school climate for innovation. *Procedia- Social and Behavioral Sciences*, *195*, 905–914. <https://doi.org/10.1016/j.sbspro.2015.06.368>

- Findikci, I. (2000). *Human resource management*. Alfa Basım Yayım Dağıtım.
- 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>
- George, L., & Sabapathy, T. (2014). Work motivation of teachers: Relationship with organizational commitment. *Canadian Social Science*, 7(1), 90–99.
- Gezer, S. (2019). *The effect of employees' motivation levels on knowledge sharing and innovative behavior: A study on food sector employees*. [Unpublished master's thesis]. Hasan Kalyoncu University, Institute of Social Sciences, Gaziantep, Turkey.
- Goksel, A. G., & Ayan, B. (2020). How is the new generation motivated at work? Intergenerational differentiation between X-Y generations on the axis of work motivation. *Journal of Social, Humanities and Administrative Sciences*, 3(11), 885–899. <https://doi.org/10.31589/JOSHAS.256>
- Gundogdu Ozel, E. (2018). *The role of motivational factors in increasing job performance; The mediating role of innovative behavior: An application in private banks in Mersin region*. [Unpublished master's thesis]. Toros University, Institute of Social Sciences, Mersin, Turkey.
- Gungor, A. (2019). *The relationship between school administrators' emotion management competencies and teachers' motivation levels*. [Unpublished master's thesis]. Usak University, Institute of Social Sciences, Usak, Turkey.
- Gurkan, G. C., & Demiralay, T. (2017). The mediating role of intrinsic motivation in the effect of individual innovativeness on employee innovative behavior: The case of surgeons in Turkey. *Journal of Entrepreneurship and Innovation Management*, 6(1), 65–90.
- Hulsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94(5), 1128–1145. <https://doi.org/10.1037/a0015978>
- Ihtiyaroglu, N. (2017). The effect of structural and psychological empowerment on teacher motivation. *Kirikkale University Journal of Social Sciences*, 7(2), 361–378.
- Incir, G. (1998). *Ergonomic design of multi-shift work* (1st ed.). MPM Publications.
- Jiying, H., & Hongbiao, Y. (2016). Teacher motivation: Definition, research development and implications for teachers. *Cogent Education*, 3(1), 1217819. <https://doi.org/10.1080/2331186X.2016.1217819>
- Karaboga, M. (2007). *The effect of Avclar district secondary education institution managers' motivation on employee (teacher) motivation*. [Unpublished master's thesis]. Beykent University, Institute of Social Sciences, Istanbul, Turkey.
- Keles, H. N. (2011). A study to determine the motivation profiles of Generation Y employees. *Journal of Organization and Management Sciences*, 3(2), 129–139.
- Kilicer, K., & Odabası, H. F. (2010). Individual innovativeness scale (IIS): Adaptation to Turkish, validity and reliability study. *Hacettepe University Journal of Education*, 38, 150–164.
- Kirag, N. (2015). Factors related to choosing the nursing profession. *Dokuz Eylul University Faculty of Nursing Electronic Journal*, 8(4), 226–231.
- Kurt, B. (2013). *The effect of primary and secondary school administrators' instructional leadership behaviors on teacher motivation*. [Unpublished master's thesis]. Marmara University, Institute of Social Sciences, Istanbul, Turkey.
- Kurtoglu, Y. (2019). *Knowledge R&D and innovation*. Gazi Kitabevi.
- Kocasarac, H. (2018). *Evaluation of innovation status of science and social sciences high school teachers*. [Unpublished doctoral dissertation]. Yıldız Technical University, Institute of Social Sciences, Istanbul, Turkey.
- Koprulu, T. S. (2011). *The relationship between organizational citizenship behaviors and motivation of teachers in primary schools*. [Unpublished master's thesis]. Marmara University, Institute of Educational Sciences, Istanbul, Turkey.

- Kucuksayrac, M. (2013). *The effect of secondary education school administrators on teacher motivation*. [Unpublished master's thesis]. Yeditepe University, Institute of Social Sciences, Istanbul, Turkey.
- Loogma, K., Kruusvall, J., & Umarik, M. (2012). Distance education as innovation: exploring innovation. Member of the vocational education teachers association in estonia. *Computers & Education*, 58(2), 808–817. <https://doi.org/10.1016/j.compedu.2011.10.005>
- Memisoglu, S., & Kalay, H. (2017). Examining students' motivation to participate in the course. *International Journal of Education Sciences*, 4(2), 78–94.
- Mutlu, C. (2019). *The relationship between leadership perceptions, managerial ethics and work motivation in educational organizations*. [Unpublished master's thesis]. Bahcesehir University, Institute of Educational Sciences, Istanbul, Turkey.
- Nokay, N. (2019). *Lifestyle as a predictor of teacher motivation*. [Unpublished master's thesis]. Mugla Sıtkı Kocman University, Institute of Educational Sciences, Mugla, Turkey.
- Oktug, Z., & Ozden, M. S. (2013). The shaping role of intrinsic motivation in the relationship between individualism/collectivism and individual innovation tendency. *Eskisehir Osmangazi University Journal of Social Sciences*, 14(2), 1–22. <https://dergipark.org.tr/en/pub/ogusbd/issue/11005/131670>
- Orucu, E., & Kanbur, A. (2008). An empirical study to examine the effects of organizational-managerial motivation factors on employee performance and productivity: A sample of service and industrial enterprises. *Management and Economics: Celal Bayar University Journal of Economics and Administrative Sciences*, 15(1), 85–97.
- Ozerbas, M. A., & Kayabasi, Y. (2019). Comparison of individual innovation profiles of classroom teachers and prospective classroom teachers. *Turkish Journal of Educational Sciences*, 17(2), 285–303.
- Ozmen, A. (2017). *Investigation of the relationship between school administrators' leadership behaviors and teachers' work motivation*. [Unpublished master's thesis]. Yeditepe University, Institute of Educational Sciences, Istanbul, Turkey.
- Ozsoy, P. (2014). *Examination of primary school teachers' intrinsic motivation and task performance in terms of supervision approaches applied by provincial education supervisors*. [Unpublished master's thesis]. Gazi University, Institute of Educational Sciences, Ankara, Turkey.
- Polat, S. (2010). *The relationship between preschool administrators' administrative power sources according to teacher perceptions and teacher motivation*. [Unpublished master's thesis]. Yeditepe University, Institute of Social Sciences, Istanbul, Turkey.
- Recepoglu, E. (2013). Examining teachers' work motivation in terms of different variables. *Kastamonu Education Journal*, 21(2), 577–588.
- Recepoglu, E., Gullu, N., & Kılinc, A. C. (2014). The relationship between the organizational health of primary schools and teachers' work motivation. *Hacettepe University Journal of Education*, 29(1), 140–156. <https://doi.org/10.16986/HUJE.2014015864>
- Roehrich, G. (2004). Consumer innovativeness: Concepts and measurements. *Journal of Business Research*, 57(6), 671–677. [https://doi.org/10.1016/S0148-2963\(02\)00311-9](https://doi.org/10.1016/S0148-2963(02)00311-9)
- Sadic, T. (2019). *The relationship between high school teachers' perceptions of individual innovation, attitudes towards educational research and research competencies*. [Unpublished master's thesis]. Yıldız Technical University, Institute of Social Sciences, Istanbul, Turkey.
- Sari, T. (2019). *The relationships between school administrators' perception management tactics, organizational climate and teacher motivation*. [Unpublished master's thesis]. Pamukkale University, Institute of Educational Sciences, Denizli, Turkey.
- Shanker, R., Bhanugopan, R., Van der Heijden, B. I., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of Vocational Behavior*, 100, 67–77. <https://doi.org/10.1016/j.jvb.2017.02.004>
- Suharyati, H. (2017). Interaction of relationship between job motivation with teacher innovativeness in improving education. *Journal of Education, Teaching and Learning*, 2(2), 228–232. <https://doi.org/10.26737/jetl.v2i2.302>

- Tanrıverdi, S. (2007). *A sample study on the relationship between participatory school culture and foreign language teachers' work motivation*. [Unpublished master's thesis]. Yeditepe University, Institute of Social Sciences, Istanbul, Turkey.
- Tuncer, P. (2011). Organizational change and leadership. *Turkish Court of Accounts Journal*, 80(1), 57–83.
- Tuncer, P. (2013). Performance appraisal and motivation in organizations. *Turkish Court of Accounts Journal*, 88, 87–108.
- Ulas, O. (2008). *The effect of total quality management on motivation and an application in educational institutions*. [Unpublished master's thesis]. Dumlupınar University, Institute of Social Sciences, Kutahya, Turkey.
- Unal, S. (2000). Activities of primary school administrators in ensuring motivation in their schools. *Pamukkale University Journal of Education*, 7, 84–90.
- Unutkan, G. A. (1995). *Management of enterprises and organizational culture*. Turkmen Kitabevi.
- Yahyaagil, M. Y. (2001). Organizational creativity and innovation. *Istanbul University Journal of Management*, 12(38), 7–16.
- Yenice, N., & Tunc, G. A. (2019). Investigation of pre-service teachers' lifelong learning tendencies and individual innovation levels. *Kastamonu Education Journal*, 27.(2), 753–765. <https://doi.org/10.24106/kefdergi.2655>
- Yilmaz, F. (2009). *The effect of organizational culture in educational organizations on teachers' work motivation*. [Unpublished master's thesis]. Selcuk University, Institute of Social Sciences, Konya, Turkey.
- Zor, K. (2020). Motivation levels of remote workers during the pandemic process. *Journal of Business and Management Research*, 9.(1), 112–128. <https://doi.org/10.24098/adyuid.639975>