



Received: 13.07.2018
Received in revised form: 18.09.2018
Accepted: 19.10.2018

Polatcan, M., & Cansoy, R. (2019). Examining studies on the factors predicting teachers' job satisfaction: A systematic review. *International Online Journal of Education and Teaching (IOJET)*, 6(1). 116-134. <http://www.iojet.org/index.php/IOJET/article/view/477>

EXAMINING STUDIES ON THE FACTORS PREDICTING TEACHERS' JOB SATISFACTION: A SYSTEMATIC REVIEW

Research Article

Mahmut Polatcan 

Karabuk University

mahmutpolatcan78@gmail.com

Ramazan Cansoy 

Karabuk University

cansoyramazan@gmail.com

Dr. Mahmut Polatcan is a faculty member of Karabuk University Faculty of Letters, Department of Educational Sciences. His main research interests are in organizational behavior, instructional leadership, effective schools, and professional development of teachers.

Dr. Ramazan Cansoy is a faculty member of Karabuk University Faculty of Letters, Department of Educational Sciences. His main research interests are in leadership development, teaching leadership, school improvement and development in teachers, professional development of teachers, values and leadership.

Copyright by Informascope. Material published and so copyrighted may not be published elsewhere without the written permission of IOJET.



EXAMINING STUDIES ON THE FACTORS PREDICTING TEACHERS' JOB SATISFACTION: A SYSTEMATIC REVIEW

Mahmut Polatcan

mahmutpolatcan78@gmail.com

Ramazan Cansoy

cansoyramazan@gmail.com

Abstract

This study focuses on the factors that predict teachers' job satisfaction. Twenty-seven out of 206 studies were examined based on various criteria. The studies were synthesised in accordance with systematic review methods. The studies that investigated teachers' job satisfaction and were conducted in the Turkish context were retrieved from WOS, ERIC, SCOPUS and ULAKBİM databases, and then the selected studies were analysed. In the analyses, themes and subthemes related to the predictive variables were formed. As a result, three themes that positively predicted teachers' job satisfaction were highlighted. These themes were administrators' behaviours, individual variables and organisational variables. The results showed that a strong school culture in which support, trust, justice and communication are established is a decisive factor in ensuring teachers' job satisfaction. Additionally, teachers' beliefs in their professional competence and having psychological well-being were found to be important factors for their job satisfaction.

Keywords: Teachers' job satisfaction, systematic review, factors affecting job satisfaction, school culture

1. Introduction

Job satisfaction is of importance for employees' happiness and the organisation's effectiveness and efficiency (Luthans, 2010). In the literature, job satisfaction is defined as the content and happiness (Davis & Bordieri, 1988; Hackman & Oldham, 1976), emotional states that please individuals (Locke, 1969), employees' attitudes towards their professional satisfaction (Spector, 1997) and the feeling of success achieved in their job (Kaliski, 2007) which are experienced as a result of gaining job experience and fulfilling their duties. Besides, job satisfaction is a compound of psychological, physiological and environmental conditions that ensure satisfaction (Aziri, 2011; Hoppock, 1935). It can be argued that there are similarities between the definitions of job satisfaction that can be defined as positive feelings about one's job or duties.

Teachers' job satisfaction is emotional reactions to their duties or instructional roles (Skaalvik & Skaalvik, 2011). In most of the studies on teachers' job satisfaction, the motivating and hygiene factors in Herzberg's (1959) dual-factor motivation theory are commonly used. Motivating factors include intrinsic motivators such as characteristics of the job, success, recognition, taking responsibility and creating opportunities. Hygiene factors that cause dissatisfaction include employees' working conditions, and organisational supervision and interpersonal relationships (Bogler, 2001). In this respect, Dinham and Scott (2000) describe the sources of job satisfaction and dissatisfaction as (a) teachers' intrinsic rewards, (b) school-based factors, and (c) out-of-school factors. Teachers' intrinsic rewards are related to their



working with students and following students' development. School-based factors include the relationships between colleagues, parents and school leaders, and oppressive and destructive student behaviours. Out-of-school factors contain those such as changes in education and the evaluation of schools by independent bodies (Skaalvik & Skaalvik, 2011).

The concept of job satisfaction that falls within organisational psychology and sociology (Arnold, Cooper & Robertson, 1998; Matiaske & Grözinger, 2011) is based on the works “*Management and the Worker*” by Roethlisberger and Diekson, and “*Job Satisfaction*” by Hoppoek that were published in 1930s (Locke, 1969). Researchers suggest that global and mixed approaches are influential on the measurement of job satisfaction. The global approach refers to individuals' general emotional reactions to their job, while the mixed approach is related to individuals' and their colleagues' working conditions, the nature of the job, organisational politics and processes, and attitudes towards pays and supervision (Bruck, Allen & Spector, 2002; Spector, 1997). On the other hand, theories of content and needs, process theories and situational theories have been influential on the theoretical development of job satisfaction (Green, 2000). It can thus be inferred that different theories and models laid the foundations for the theoretical bases of job satisfaction.

In terms of the theories of content and needs, job satisfaction was based on Maslow's (1943) *Hierarchy of Needs* and Herzberg's (1966) *Dual-Factor Theory*. Needs theories mostly focus on personal needs that match professional satisfaction (e.g. eating, drinking and housing) or values (e.g. respect, recognition and success). Content theories concentrate on the factors that initiate, direct, maintain and halt human behaviours (Amos, Pearson & Ristaw, 2008). Process theories are fed by theories including Adams's (1965) “*Equity Theory*” and Bandura's (1977) “*Social Learning Theory*”. These theories aim at explaining the relationships between values, needs and expectations that constitute motivation and job satisfaction (Amos et al., 2008; Green, 2000). Process theories emphasise cognitive thinking processes, and employees' motivation and satisfaction (Ololube, 2006). They determine individuals' perceptions in work environments and the way in which they interpret and understand events (Kerschen, Armstrong & Hillman, 2006). Consequently, the theoretical bases of job satisfaction spread across a wide area in the literature.

In addition to the theoretical bases mentioned above, situational models that form the third theoretical framework for job satisfaction are associated with Locke's (1976) *Range of Affect Theory*, and Hackman and Oldham's (1976) *Job Characteristics Model*. These theories focus on job characteristics (e.g. the nature and quality of the job), and organisational characteristics (the organisations' basis leadership and promotion criteria) (Glisson & Durick, 1988). Situational models are determined by situational characteristics and events. Employees call upon situational characteristics while evaluating the working conditions of the organisation and the wage conditions before joining the organisation. Situational events include positive (e.g. respecting employees and rewards like praises) and negative (e.g. disrespect among colleagues and complex work processes) events that employees encounter when they start the job (Glassman & McAfee, 1992). Based on these models, it can be argued that various characteristics of individuals and organisations are effective in promoting job satisfaction.

The antecedents and consequences of job satisfaction were examined in international studies in the field of education. In these studies, job satisfaction was explored with variables such as motivation, self-efficacy perception, working conditions, stress and school culture (e.g. Klassen, Usher & Bong, 2010; Koustelios, 2001; Ma & MacMillan, 1999; Skaalvik & Skaalvik, 2011; Skaalvik & Skaalvik, 2009; Somech & Drach-Zahavy, 2000; Taylor & Tashakkori, 1995; Van Houtte, 2006). In the Turkish context, many studies that examined the relationship between job satisfaction and different individual or organisational characteristics

have been conducted since 2000s. In Turkey, job satisfaction was often studied with relation to the concepts of leadership, self-efficacy, administrative behaviours, job performance and commitment (e.g. Çevik, 2017; Güngör, 2016; Okçu & Çetin, 2017; Şeşen, Tabak & Arlı, 2017; Taş, 2017; Türkoğlu, Cansoy & Parlar, 2017; Uzun & Özdem, 2017). As can be inferred from these studies, job satisfaction is seen as an important variable in schools.

Although there are studies on variables that can be antecedents to job satisfaction across the world, no studies have been encountered which examine and interpret the findings regarding the variables that have potential effects on job satisfaction in the Turkish context. In this regard, this study sets out to fill a gap and extend the literature in this sense. Additionally, reporting the common findings in different studies can provide practitioners certain practical results in making evidence-based policies and improving teachers' job satisfaction. Presenting a synthesis of the data provided by evidence-based studies can be of significance for educational stakeholders. By means of such results, teachers' practising their profession more contentedly can be facilitated at the organisational level. As for teachers, such information can raise their awareness. Moreover, researchers can make certain decisions regarding the variable that they can use in their studies by seeing the results of different studies as a whole. Consequently, this study aimed at revealing the factors that affect teachers' job satisfaction in Turkey.

2. Method

The factors that predict teachers' job satisfaction were examined in this study. Systematic review refers to synthesising the findings of many different studies in a way that is clear, transparent, replicable and accountable (Oakley, 2002). Systematic review or examination is a method of defining and synthesising research findings regarding a certain topic. In systematic reviews, empirical findings are brought together based on predetermined criteria to answer a research question. In this methodology, clear and systematic methods are used to minimize researchers' subjective judgements. Systematic review studies enable researchers to make a synthesis of the studies on a topic and determine the areas that need to be explored, and practitioners and policy-makers to take measures for possible or existing problems (Higgins & Green, 2011). Systematic review is commonly used as a methodology in health sciences, and there have been discussions about its use in educational sciences. Educational researchers view systematic review studies as significant. This is because such studies facilitate reaching research findings as a whole (Clegg, 2005; Hammersley, 2008).

2.1. Selection of studies

Systematic reviews consist of sections that are search strategy, inclusion criteria, scanning, gathering and defining the data, demonstrating the quality of the studies included, and synthesis of the findings, respectively (Karaçam, 2014). In the first step, the selection criteria and databases were determined. Then, the criteria for including the studies in the analysis and the scanning process were followed. In the last step, the quality of the studies was examined with a synthesis of their findings.

In according with the research aim, studies were searched in the databases including Web of Science, ERIC, SCOPUS and ULAKBIM. In the data gathering process, the query “*teachers' job satisfaction*” was searched in the databases concerned. These searches were done in both Turkish and English.

At this point, the following criteria were determined by the researchers, which was also based on expert opinion: (i) being a full-text empirical paper in the field of education, (ii) being published in national and international journals between 2000-2017, (iii) being an original study, (iv) focusing on teacher job satisfaction, (v) reporting findings related to the research aim, (vi) being conducted in educational institutions, (vii) being conducted in schools in the

Turkish context, (viii) being quantitative and relational studies, (xi) clearly describing elements such as sample, method and measurement tools and providing statistically necessary information accurately. In this sense, the selection was limited to studies found in databases that are accepted as reputable in science and published in refereed journals. Besides, the time frame was set as between 2000-2017 because the empirical studies on teachers' job satisfaction became widespread in the national literature during this period.

A total of 206 studies were retrieved by searching the key word “*teachers' job satisfaction*” in the databases including Web of Science, ERIC, SCOPUS and ULAKBİM. Then, 161 studies that did not predict job satisfaction were excluded from the evaluation, and 18 recurring studies were also eliminated. Lastly, the remaining 27 studies were analysed in detail. An evaluation form was developed in accordance with the criteria for the selection of studies. The studies were retrieved by the researchers as they used this form. The full-text studies were coded as S1, S2, S3,...S27, and stored in the computer environment. The authors, topics, methods and findings of the studies were divided into categories by using Microsoft Office Excel.

The quality of the 27 articles were evaluated based on EPPI-Centre (2018), and the framework for assessing the weight of evidence proposed by Gough, Oliver and Thomas (2017). Evaluating the methodological quality, methodological relevance and topic relevance of studies as a whole demonstrates the weight of evidence. In this regard, the design of the studies can make them stronger in terms of evidence. Besides, the methodology and the topic of the articles being relevant also contribute to this aspect. Both researchers of the present study prepared a quality check-list and evaluated the studies by rating them from 1 to 4 based on quality. In case of a disagreement, the opinion of an expert was obtained. The studies that did not meet the necessary criteria in the quality check-list were excluded from the analysis. For example, the studies whose methodologies were not written well, and reliability and validity values were not provided were excluded.

In this step, the studies were summarised and the themes were formed in accordance with the research aims. The summaries under each theme were read and evaluated to reach primary themes. The studies were read and evaluated independently by the two researchers. Lastly, the studies evaluated by the researchers were combined in a single form. The studies included in the analysis are presented in Table 1.

Table 1. Findings regarding the studies examined

No.	Researchers	Number of participants	Findings
1	Türkoğlu, Cansoy & Parlar (2017)	Quantitative n=489	The self-efficacy belief for ensuring student participation is related to teachers' job satisfaction ($r=.22, p < .05$) and predicts teachers' job satisfaction ($\beta=.30$).
2	Çevik (2017)	Quantitative n=358	Teachers' well-being, valuing their lives and life satisfaction that refers to evaluating life positively are related to their job satisfaction ($r=.56, p < .05$), and life satisfaction predicts job satisfaction ($R^2=.31, p < .05$). Teacher self-efficacy and job satisfaction are related ($r=.33, p < .05$) and self-efficacy predicts job satisfaction ($R^2=.34$). Self-respect that refers to individuals' accepting themselves as a whole is related to job satisfaction ($r=.36, p < .05$) and self-respect predicts teachers' job satisfaction ($R^2=.35, p < .05$).
3	Okçu & Çetin (2017)	Quantitative n=830	Intimidation towards the job is related to job satisfaction ($r=-.38$), and intimidation towards relationships is also related to job satisfaction ($r=-.31$). Intimidating behaviours are negatively predict and explain job satisfaction ($R^2=.28$).
4	Güngör (2017)	Quantitative n=319	Ethical leadership behaviours that indicate school principals' exhibiting ethical behaviours, being honest and trustworthy and keeping their promises are positively and significantly related to job satisfaction ($r=.44, p < .05$), and ethical leadership behaviours predict teachers' job satisfaction ($\beta=.30$).
5	Taş (2017)	Quantitative (n=121)	School principals' individual-oriented leadership behaviours that emphasise teachers' interests and needs are related to teachers' job satisfaction ($r=.73, p < .05$). School principals' individual-oriented leadership behaviours predict teachers' job satisfaction ($\beta=.51$).
6	Uzun & Özdem (2017)	Quantitative n=250	Administrative support towards appreciating teachers, exhibiting positive behaviours and helping employees is related to job satisfaction ($r=.45, p < .05$) and perceived administrator support predicts job satisfaction ($\beta=.41$).
7	Sesen, Tabak & Arlı (2016)	Quantitative, n=208	Teachers' self-observation behaviours, which refers following and being aware of how well one does his/her job, is related to job satisfaction ($r=.34, p < .05$). Concentrating on thinking about natural rewards, which refers to behaviours that individuals like, is related to job satisfaction ($r=.22, p < .05$). Self-observation predicts job satisfaction ($\beta=.22$). Concentrating on thinking about natural rewards is a positive and significant predictor of job satisfaction ($\beta=.11$).
8	Tabancı (2016)	Quantitative Relational n=369	Teachers' loneliness in social relationships that indicate the environments where they have rare or no social relationships is related to intrinsic job satisfaction ($r=-.26, p < .05$) and loneliness in social relationships is a predictor of intrinsic job satisfaction ($\beta=-.25$). Loneliness in social relationships is related to extrinsic job satisfaction ($r=-.21, p < .05$) and is a predictor of extrinsic job satisfaction ($\beta=-.15$).
9	Tan (2016)	Quantitative (n=822)	Team leadership behaviours that highlight resolution, cooperation, motivation, strengthening the staff and effective communication predict teachers' job satisfaction ($\beta=.70, p < .05$).
10	Ordu (2016)	Quantitative n=370	The perception of managing differences at school that refers to school administrators' accepting the differences in the existence and values of employees and using these differences for the organisation is a predictor of job satisfaction. Managing the differences towards individual attitudes and behaviours are related to job satisfaction ($r=.48, p < .05$) and is a predictor of job satisfaction ($\beta=.19$). Managing the administrative practices and policies are related to job satisfaction ($r=.53, p < .05$) and predicts job satisfaction ($\beta=.34$).
11	Buluç Demir (2015)	Quantitative n=395	Teacher self-evaluation, a dimension of teacher self-efficacy, predicts teachers' job satisfaction ($\beta=.19$). Teachers' contribution to the improvement of schools predicts teachers' job satisfaction ($\beta=.29$). Teacher self-efficacy is a predictor of teachers' job satisfaction.

12	Demirtaş & Alanoğlu (2015)	Quantitative n=379	Teachers' participation in decisions at school predicts their job satisfaction ($R^2=.41$). Job satisfaction have a positive and significant relationship with participation in educational decisions ($r=.36, p < .05$) and participation to administrative decisions ($r=.34, p < .05$).
13	İlgaz, Parylo & Sungu (2015)	Quantitative n=600	School principals' instructional supervision behaviours that feature improving instruction and teachers, and guiding them by visiting classrooms predict different dimensions of teachers' job satisfaction. Instructional supervision behaviours are related to teachers' administrative satisfaction ($r=.65, p < .05$) and explain administrative satisfaction ($R^2=.42$). Instructional supervision behaviours are related to the satisfaction related to working life ($r=.42, p < .05$) and explain the satisfaction related to working life ($R^2=.18$), Instructional supervision behaviours are related to, and explain, self-improvement and safety in terms of economic issues ($r=.35, p < .05$), ($R^2=.12$). Instructional supervision behaviours predict job satisfaction as a whole.
14	Büyükgoze-Kavas, Duffy, Güneri & Autin (2014)	Quantitative n=500	Teachers' positive feelings that express their pleasure from life is related to job satisfaction ($r=.49, p < .05$), and teachers' positive feelings predict job satisfaction ($\beta=.33$). Teachers' job satisfaction is related to their levels of accomplishing their goals at the work place ($r=.44, p < .05$), and these levels predict job satisfaction ($\beta=.25$). Teachers' job satisfaction is related to perceived organisational support ($r=.36, p < .05$), and perceived organisational support predicts job satisfaction ($\beta=.18$).
15	Büyükgoze-Kavas, Duffy, Güneri & Autin (2014)	Quantitative n=500	Teachers' job satisfaction is related to perceived organisational support ($r=.36, p < .05$), and job satisfaction is predicted ($\beta=.18$).
16	Cerit (2014)	Quantitative n=304	Organisational collectivism that emphasises thinking about others in the organisation, being helpful and collaboration is related to teachers' job satisfaction ($r=.73, p < .05$) and the perception of organisational collectivism among teachers positively predicts their job satisfaction ($\beta=.69$).
17	Elma (2013)	Quantitative n=686	Operational justice that refers to the fair distribution of organisational resources is related to job satisfaction ($r=.63, p < .05$), and it predicts teachers' job satisfaction ($\beta=.34$). Interactional justice that refers to employees' respect and trust to each other is related to job satisfaction ($r=.64, p < .05$), and it also predicts job satisfaction ($\beta=.29$).
18	Karakuş & Çankaya (2012)	Quantitative n=237	Communication social relationships, reputation damage and psychological violence that teachers are exposed to are related to job satisfaction ($r=-.28, p < .05$) and psychological violence is a negative predictor of job satisfaction ($\beta=-.23$). Teachers' burnout is related to their job satisfaction ($r=-.34, p < .05$) and burnout negatively predicts job satisfaction ($\beta=-.28$).
19	Gümüş, Hamarat, Çolak & Duran (2012)	Quantitative n=238	Organisational identification that highlights individuals' feeling of belonging to the organisation they work in predicts teachers' job satisfaction. Identification with school ($r=.37, p < .05$) and professional identification ($r=.30, p < .05$) are related to job satisfaction.
20	Yılmaz & Altınkurt (2012)	Quantitative (n=249)	School administrators' use of rewards significantly and positively predicts teachers job satisfaction ($\beta=.29$).

21	Bektaş & Öçal (2012)	Quantitative n=291	School principals' behaviours of encouraging collaboration among teachers (i.e. leadership encouraging collaboration) are a positive and significant predictor of teachers' job satisfaction ($\beta = .21, p < .05$). Collaboration-based leadership is positively and significantly related to job satisfaction ($r = .21, p < .05$).
22	Savaş (2012)	Quantitative n=997	School administrators' emotional intelligence that refers to their being aware of themselves, and understanding their own feelings as well as others is a predictor of teachers' job satisfaction ($\beta = .11$). Emotional labour that refers to managing employees' feelings and expressions to fulfil the emotional requirements of a job is a positive and significant predictor of teachers ($\beta = .09$).
23	Koç, Yazıcıoğlu & Hatipoğlu (2009)	Quantitative n=432	Teachers' perceived achievement of goals and their performance levels towards achieving set targets are related to job satisfaction ($r = .46, p < .05$) and perceived performance levels predict teachers' job satisfaction ($R^2 = .21$).
24	Yılmaz & İzgar (2009)	Quantitative (n=298)	The environment of organisational creativity that features supporting different ideas and individual efforts at school, and the climate towards acting uniquely and producing new things predicts' teachers' job satisfaction ($R^2 = .46$).
25	Cerit (2009)	Quantitative (n=595)	Servant leadership behaviours that highlight school administrators' valuing their employees, guiding and improving them, meeting their needs and exhibiting sharing behaviours are related to teachers' job satisfaction ($r = .66, p < .05$) and administrators' servant leadership behaviours predict teachers' job satisfaction ($\beta = .76$).
26	Mamatoğlu (2008)	Quantitative n=194	One's identification with other teachers, an organisational identification subdimension, is related to teachers' job satisfaction ($r = .28, p < .05$) and predicts job satisfaction ($\beta = .29$).
27	Korkmaz (2007)	Quantitative n=630	School administrators' transformational leadership behaviours towards support, guiding teachers in an inspiring way, motivation and setting common goals are related to job satisfaction ($r = .58, p < .05$) and transformational behaviours predict teachers' job satisfaction ($\beta = .56$).

3. Findings

In the studies, three themes were revealed which significantly predicted teachers' job satisfaction. These themes are as follows: *School administrators' administrative behaviours, individual variables and organisational variables*. In this section, these primary variables that predict job satisfaction were discussed by synthesising different research findings.

3.1. School principals' administrative behaviours

School principals' administrative behaviours were found to be a predictor of teachers' job satisfaction (see Table 2).

Table 2. Relationships between administrators' behaviours and teachers' job satisfaction

Main theme	Sub-themes	Predictive characteristics	Studies Examined	Prediction of job satisfaction
School principals' administrative behaviours	Creating a collaborative environment and team spirit at school	Transformational leadership	Korkmaz (2007)	+
		Servant leadership	Cerit (2009)	+
		Valuing teachers	Taş (2017)	+
		Team leadership	Tan (2006)	+
		Culture of collaboration	Bektaş & Öçal (2012)	+
		Ethical leadership	Güngör (2017)	+
	Forming a trust-based school culture	Being fair	Elma (2013)	+
		Being helpful	Uzun & Özdem (2017)	+
	Being in constant communication and interaction with teachers	Providing positive professional feedback	Ilgan, Parylo & Sungu (2015)	+
		Respecting differences	Ordu (2016)	+
	Supporting and tolerating employees	Exhibiting emotional intelligence behaviours	Savaş (2012)	+

These themes are: (i) creating a collaborative environment and team spirit at school, (ii) forming a trust-based school culture, (iii) being in communication/interaction with teachers, and (vi) supporting and tolerating employees.

Creating a collaborative environment and team spirit at school:

As is seen in Table 2, there are common findings regarding school principals' behaviours predicting teachers' job satisfaction (Bektaş & Öçal, 2012; Cerit, 2009; Güngör, 2016; Korkmaz, 2007; Tan, 2006; Taş, 2017). Korkmaz (2007) found that school principals' transformational leadership behaviours positively predicted teachers' job satisfaction. Administrators' behaviours that inspire, motivate and promote common goals were related to, and predicted, teachers' job satisfaction. In another study, Cerit (2009) demonstrated that school principals' servant leadership behaviours positively predicted teachers' job satisfaction. School principals' valuing their employees, motivating, guiding and improving them, meeting their individual needs and sharing are characteristics of servant leadership. In a similar study, Taş (2017) showed that teachers' job satisfaction was positively predicted by school principals' caring and honourable behaviours. In another study, Tan (2012) found that team leadership behaviours towards resolution, collaboration, motivation and strengthening the staff positively predicted teachers' job satisfaction. Similarly, Bektaş and Öçal (2012) reported that teachers' job satisfaction was positively predicted by the leadership behaviours that encourage collaboration among teachers at school. Likewise, Güngör (2017) demonstrated that school principals' ethical leadership behaviours that feature consistency, integration and trustworthiness positively predicted teachers' job satisfaction.

Forming a trust-based school culture:

On the other hand, Elma (2013) found that the fair distribution of school resources was a positive predictor of teachers' job satisfaction. Uzun and Özdem (2017) reported that teachers' job satisfaction was predicted by school principals' behaviours of helping and appreciating teachers.

Being in communication/interaction with teachers:

Consistently, Ilgan, Parylo and Sungu (2015) observed that administrative satisfaction and satisfaction related to work life were positively predicted when school principals provided feedback towards improving instruction and teachers. Besides, Ordu (2016) showed that school principals' different thinking dispositions and being careful about these differences in practice positively predicted teachers' job satisfaction.

Supporting and tolerating employees:

On the other hand, Savaş (2012) discovered that school principals' emotional intelligence and emotional labour behaviours towards understanding teachers were important variables in predicting their job satisfaction.

Based on these findings, it can be stated that school principals' behaviours of being tolerant and managing differences at school, being fair and supporting teachers positively predict teachers' job satisfaction.

3.2. Individual variables

Certain variables the positively predicted teachers' job satisfaction were reported (see Table 3).

Table 3. Relationships between individual variables and teachers' job satisfaction

Main theme	Sub-themes	Predictive characteristics	Studies Examined	Prediction of job satisfaction
Individual variables	Teachers' positive perceptions of professional competence/efficacy	Teachers' self-evaluation	Buluç & Demir (2015)	+
		Teacher self-efficacy	Çevik (2017)	+
		Teacher self-efficacy (Ensuring student participation)	Türkoğlu, Cansoy & Parlar (2017)	+
		Teachers' efficacy perceptions for reaching goals	Yazıcıoğlu & Hatipoğlu (2009)	+
		Efficacy perceptions of reaching goals	Büyükgoze-Kavas, Duffy, Güneri & Autin (2014)	+
		Self-efficacy perceptions of doing quality work	Sesen, Tabak & Arli (2016)	+
	Being psychologically healthy	Self-respect and job satisfaction	Çevik (2017)	+
		Life satisfaction	Büyükgoze-Kavas, Duffy, Güneri & Autin (2014)	+
		Teachers' autonomous and unique behaviours	Sesen, Tabak & Arli (2016)	+

These themes are: (i) teachers' positive perceptions of professional competence/efficacy, and (ii) their being psychologically healthy. These characteristics can be said to be potential individual variables for enhancing job satisfaction.

Teachers' positive perceptions of professional competence/efficacy:

Teachers' perceptions of professional competence, well-being and life satisfaction predicted their job satisfaction (Buluç & Demir, 2015; Büyükgoze-Kavas, Duffy, Güneri & Autin 2014; Çevik, 2017; Koç, Yazıcıoğlu & Hatipoğlu, 2009; Sesen, Tabak & Arli, 2016; Türkoğlu, Cansoy & Parlar, 2017). Buluç and Demir (2015) found that teachers' self-evaluation was a positive predictor of their job satisfaction. In a similar study, Çevik (2017) indicated that teacher self-efficacy perceptions predicted job satisfaction, while Türkoğlu, Cansoy and Parlar (2017) demonstrated that teachers' self-efficacy perception regarding student participation was a strong predictor of their job satisfaction. In a way that supports these findings, Koç, Yazıcıoğlu and Hatipoğlu (2009) showed that teachers' job satisfaction was positively

predicted by their perceptions of competence for achieving educational goals. Similarly, Büyükgoze-Kavas, Duffy, Güneri and Autin (2014) found that teachers' perceptions of competence for achieving educational goals positively predicted job satisfaction, and Sesen, Tabak and Arlı (2016) demonstrated that teachers' behaviours related to job quality and their monitoring of themselves related to the job positively predicted their job satisfaction.

Teachers' being psychologically healthy:

Teachers' positive psychological perceptions are important for job satisfaction. Çevik (2017) showed that self-respect that refers to individuals' forming their own identity and valuing themselves, and life satisfaction that refers to positive life perceptions positively predicted teachers' job satisfaction. Likewise, Büyükgoze-Kavas, Duffy, Güneri and Autin (2014) reported that teachers' positive feelings of pleasure from life positively predicted teachers' job satisfaction. Besides, Sesen, Tabak and Arlı (2016) found that teachers' job satisfaction was positively predicted by individuals' performing autonomous and unique behaviours related to their job.

3.3. Organisational variables

Some variables at the organisational level were found to positively predict teachers' job satisfaction.

Table 4. *Relationships between organisational variables and teachers' job satisfaction*

Main theme	Sub-themes	Predictive characteristics	Studies Examined	Prediction of job satisfaction
Organisational variables	Perceived Support, respect to ideas and values	Participation to decisions	Demirtaş & Alanoğlu (2015)	+
		Forming a creative environment	Yılmaz & Izgar (2009)	+
		Solidarity and support, strong social relationships	Cerit (2014); Tabancalı (2016)	+
	Caring about ideas and individual values,	Valuing employees, organisational identification	Büyükgoze-Kavas, Duffy, Güneri & Autin (2014)	+
		Organisational identification	Gümüş, Hamarat, Çolak & Duran (2012)	+
		Identification with teachers	Mamatoğlu (2008)	+
	Psychological mobbing	Negative interpersonal relationships	Karakuş & Çankaya (2012); Okçu & Çetin (2017); Tabancalı (2016)	-
		Destruction in feelings	Karakuş & Çankaya (2012)	-

These themes are: (i) perceived support, respect to ideas and values, (ii) caring about ideas and individual values, (iii) psychological mobbing.

Certain variables were reported which positively (Büyükgoze-Kavas, Duffy, Güneri & Autin, 2014; Cerit, 2014; Gümüş, Hamarat, Çolak & Duran, 2012; Demirtaş & Alanoğlu, 2015; Mamatoğlu, 2008; Yılmaz & Izgar, 2009), or negatively predicted teachers' job satisfaction (Karakuş & Çankaya, 2012; Okçu & Çetin, 2017; Tabancalı, 2016).

Perceived support, respect to ideas and values:

Demirtaş and Alanoğlu (2015) demonstrated that teachers' participation to instructional and administrative decisions at school positively predicted their job satisfaction. Similarly, Yılmaz and Izgar (2009) showed that teachers' job satisfaction was positively predicted by organisational creativity environment that highlighted the climate towards different ideas, supporting individual efforts, acting uniquely and being innovative. Besides, they also found that teachers' job satisfaction increased with the administrative support perceived by them. Cerit (2014) reported that the perception of collectivism that encourage solidarity and support positively predicted job satisfaction.

Caring about ideas and individual values:

Büyükgoze-Kavas, Duffy, Güneri and Autin (2014) determined that teachers' job satisfaction was positively predicted by their having a workplace environment in which they are valued. Furthermore, they also revealed that the integration with organisational values positively predicted job satisfaction. Gümüş, Hamarat, Çolak and Duran (2012) reported that identification with school and professional identification positively predicted job satisfaction, and Mamatoğlu (2008) also showed that identification with other teachers positively predicted satisfaction.

Psychological mobbing:

Various organisational characteristics negatively predicted job satisfaction. Karakuş and Çankaya (2012) reported that the psychological violence teachers are exposed to negatively predicted their job satisfaction. Likewise, Okçu and Çetin (2017) observed that intimidation towards the job and intimidation towards relationships negatively predicted job satisfaction. On the other hand, Tabancalı (2016) indicated that loneliness negative predicted intrinsic and extrinsic job satisfaction in environments where teachers' social relationships at a low level. Lastly, Karakuş and Çankaya (2012) found that as teachers' have increased feelings of incompetence, failure and insensitivity in their profession, their burnout negatively predicted their job satisfaction.

4. Results and discussion

In this study, 27 empirical studies on teachers' job satisfaction were examined. In these empirical studies, there were three factors that predicted job satisfaction. These were school administrators' administrative behaviours, individual variables and organisational variables. When the three factors are evaluated together, it can be stated that personal relationships at school and teachers' individual competence perceptions and being psychologically healthy were important in ensuring their job satisfaction.

Certain characteristics contributed to teachers' job satisfaction. These characteristics were ensuring collaboration and creating team spirit at school, culture of trust, and school principals' sustaining communication and interaction with teachers. On the other hand, social support, psychological support or meeting different needs, and strong emphatic relationships were decisive in ensuring job satisfaction. Besides, teachers' professional self-efficacy beliefs, positive attitudes towards life and being psychologically healthy were individual variables that

explained job satisfaction. In parallel to the findings in this study, Utriainen and Kyngas (2009) formed three themes including interpersonal relationships, patient care and organising nursing tasks in their study in which they compiled articles on nursery. The theme 'interpersonal relationships' consisted of sub-themes such as the feeling of synergy, interaction and communication, team work, organisational climate and peer support. The theme 'patient care' contained sub-themes including the importance of patient care, opportunities for quality patient care and good relationships with patients. Lastly, the theme 'organising nursing duties' was formed with sub-themes such as work-family relations, supportive leadership, workplace, appropriate workload, salary and benefits, autonomy, professionalism and professional development.

In accordance with the research findings, Lu, While and Barriball (2005) found in their review of studies related to nurses' job satisfaction that work stress rather than working conditions affected job satisfaction. Moreover, they reported that nurses' work load increased their work stress, which weakened job commitment and relationships. Taylor and Tashakkori (1995) determined school culture and participation to decision-making processes as antecedents of job satisfaction. Crossman and Harris (2006) stated that the environmental factors forming job characteristics and workplace environment affected job satisfaction. In a similar vein, Brief and Weiss (2002) indicated that when individuals have more intense relationships with their environment, they exhibit positive personality characteristics, and when they work in supportive environments, they have higher job satisfaction.

In studies on job satisfaction, it is emphasized that the concept is composed of intrinsic and extrinsic factors. Intrinsic factors cover elements such as personality, education, talent, age and marital status, while extrinsic factors include those such as wage, promotion opportunities, colleagues and supervision (Spector, 1997). According to Hackman and Oldham (1976), the variety of tasks in the organisation, the identity and importance of positions, autonomy for employees and feedback facilitate job satisfaction. Spector (1997) asserted that the variety of skills and tasks, importance of tasks, job autonomy and feedback towards the job were among the determinants of job satisfaction. Luthans (2010) said that the primary determinants of job satisfaction were the job, wage, promotion, supervision and colleagues. Tella, Ayeni and Popoola (2007) pointed out that job characteristics, interests, status, security and promotion opportunities affected job satisfaction. For Kreitner and Kinicki (1998), meeting individual needs, disagreements, values gained, equality and quality were among the decisive characteristics behind job satisfaction.

As can be inferred from the a fore mentioned statements, the elements that ensure job satisfaction mostly include job characteristics, success, recognition, working conditions and interpersonal relationships according to the findings in this study. These results are consistent with Herzberg's (1959) dual-factor motivation theory. On the other hand, job satisfaction can be said to develop depending on school-based factors and teachers' intrinsic rewards. Skaalvik and Skaalvik's (2011) study also support these results. They showed that strong relationships and a supportive environment at school were important in promoting job satisfaction.

According to the findings in this study, the following suggestions can be offered for practitioners: School administrators who want to enhance teachers' job satisfaction can be suggested to exhibit integrative and sincere behaviours and create a strong collaboration environment and support culture at school. Besides, administrators can support the improvement of teachers' professional self-efficacy beliefs. Furthermore, teachers' job satisfaction can be strengthened by supporting them psychologically when needed and forming a proper school culture. In this respect, school administrators can be suggested to create a strong school culture based on trust, justice and support as they care about communication, interaction

and helpfulness in their schools. Moreover, teachers should receive counselling services towards improving their individual psychological determinants. Policy-makers, on the other hand, can improve the working conditions and thus make school principals pay more attention to teachers. This is because school principals' being too busy with the bureaucratic routines or daily tasks can hinder the communication with teachers and forming a healthy working environment. As for further research, the studies examined in the present study are limited to a certain number of papers. The study can be replicated by including theses/dissertation and in the international literature. The studies that examined the effects of administrative behaviours, organisational variables and individual variables on job satisfaction mostly adopted quantitative survey and relational models. Therefore, descriptive qualitative studies and causal studies can be conducted to reveal the cause-effect relationship in-between. Additionally, the relationships between two variables were investigated in most relational studies on job satisfaction. In this regard, many other variables can be studied. Mediator and moderator variables can also be included in such studies.

References

- Adams, J. S. (1965) Inequity in social exchange. L. Berkowitz (Ed.). In *Advances in experimental social psychology*. New York: Academic Press.
- Amos, T., L., Pearson, N., J., Ristaw, A., & Ristaw, L. (2008). *Human resource management*. Cape Town: Juta & Cooperation
- Arnold, J., Cooper, C. L. & Robertson, I. T. (1998). *Work psychology: Understanding human behavior in the workplace* (3rd ed.). Harlow, England: Person Education.
- Aziri, B. (2011). Job satisfaction: A literature review. *Management Research & Practice*, 3(4), 77-86.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. doi:10.1037/0033-295X.84.2.191
- Bektaş, F., & Öçal, M. F. (2012). School culture as the predictor of job satisfaction with respect to teachers' perceptions: A causal study. *The New Educational Review*, 27(1), 295-302.
- Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, 37(5), 662-683.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53, 279-307.
- Bruck, C. S., Allen, T. D., & Spector, P. E. (2002). The relation between work-family conflict and job satisfaction: A finer-grained analysis. *Journal of Vocational Behavior*, 60(3), 336-353.
- Buluç, B., & Demir, S. (2015). İlk ve ortaokul öğretmenlerinin öz-yeterlik alguları ile iş doyumları arasındaki ilişki. *Journal of Kirsehir Education Faculty*, 16(1), 289-308.
- Buyukgoze-Kavas, A., Duffy, R. D., Güneri, O. Y., & Autin, K. L. (2014). Job satisfaction among Turkish teachers: Exploring differences by school level. *Journal of Career Assessment*, 22(2), 261-273. doi: 10.1177/1069072713493980
- Cerit, Y. (2009). The effects of servant leadership behaviours of school principals on teachers' job satisfaction. *Educational Management Administration & Leadership*, 37(5), 600-623. doi: 10.1177/1741143209339650
- Cerit, Y. (2014). The relationship between classroom teachers' job satisfaction and organizational collectivism and individualism. *Eğitim ve Bilim*, 39(173), 54-65.
- Clegg, S. (2005). Evidence-based practice in educational research: A critical realist critique of systematic review. *British Journal of Sociology of Education*, 26(3), 415-428.
- Çevik, G. B. (2017). The Roles of life satisfaction, teaching efficacy, and self-esteem in predicting teachers' job satisfaction. *Universal Journal of Educational Research*, 5(3), 338-346. doi: 10.13189/ujer.2017.050306
- Crossman, A., & Haris, P. (2006). Job satisfaction of secondary school teachers. *Educational Management Administration and Leadership*, 34(1), 29-46.
- Davis, G. L., & Bordieri, J. E. (1988). Perceived autonomy and job satisfaction in occupational therapists. *American Journal of Occupational Therapy*, 42(9), 591-595.
- Demirtaş, Z., & Alanoğlu, M. (2015). Öğretmenlerin karara katılımı ve iş doyumları arasındaki ilişki. *Journal of Kirsehir Education Faculty*, 16(2), 83-100.

- Dinham, S., & Scott, C. (2000). Moving into the third, outer domain of teacher satisfaction. *Journal of Educational Administration*, 38(4), 379-396.
- EPPI (2018). What is a systematic review? 02/02/2018 tarihinde <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=67> sayfasından erişilmiştir.
- Elma, C. (2013). The predictive value of teachers' perception of organizational justice on job satisfaction. *Eurasian Journal of Educational Research*, 51, 157-175.
- Glassman, M., & McAfee, B. (1992). Integrating the personnel and marketing functions: The challenge of the 1990s. *Business Horizons*, 35(3), 52-59.
- Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Science Quarterly*, 33(1), 61-81.
- Gough, D., Oliver, S., & Thomas, J. (Eds.). (2017). *An introduction to systematic reviews*. London: Sage Publications.
- Green, J. (2000). *Job satisfaction of community college chairpersons*. Doctoral Dissertation. Virginia Tech Institute and State University, Blacksburg, Virginia.
- Gümüş, M., Hamarat, B., Çolak, E., & Duran, E. (2012). Organizational and occupational identification: Relations to teacher satisfaction and intention to early retirement. *Career Development International*, 17(4), 300-313. doi:10.1108/13620430810860558
- Güngör, S. K. (2016). The prediction power of servant and ethical leadership behaviours of administrators on teachers' job satisfaction. *Universal Journal of Educational Research*, 4(5), 1180-1188. doi:10.13189/ujer.2016.040531
- Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16(2), 250- 279.
- Hammersley, M. (2008). Paradigm war revived? On the diagnosis of resistance to randomized controlled trials and systematic review in education. *International Journal of Research & Method in Education*, 31(1), 3-10.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work*. New York: John Wiley & Sons.
- Herzberg, F. (1966). *Work and the nature of man*. New York: Thomas Crowell Publishers.
- Higgins, J. P., & Green, S. (2011). *Cochrane handbook for systematic reviews of interventions*. John Wiley & Sons.
- Hoppock, R. (1935). *Job satisfaction*. Oxford, England: Harper.
- Ilgan, A., Parylo, O., & Sungu, H. (2015). Predicting teacher job satisfaction based on principals' instructional supervision behaviours: a study of Turkish teachers. *Irish Educational Studies*, 34(1), 69-88.
- Karaçam, Z. (2014). Sistematik derleme metodolojisi: Sistematik derleme hazırlamak için bir rehber. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi*, 6(1), 26-33.
- Karakuş, M., & Çankaya, İ. H. (2012). Öğretmenlerin maruz kaldıkları psikolojik şiddete ilişkin bir modelin sınanması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 42, 225-237.
- Kerschen, A. M., Armstrong, E. P., & Hillman, T. N. (2006). Job satisfaction among staff, clinical, and integrated hospital pharmacists. *Journal of Pharmacy Practice*, 19(5), 306-312.

- Klassen, R., Usher, E., & Bong, M. (2010). Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. *The Journal of Experimental Education*, 78(4), 464-486.
- Koç, H., Yazıcıoğlu, İ., & Hatipoğlu, H. (2009). Öğretmenlerin iş doyum algıları ile performansları arasındaki ilişkinin belirlenmesine yönelik bir araştırma. *Ondokuz Mayıs Üniversitesi Eğitim Fakültesi Dergisi*, 28(1), 13-22.
- Korkmaz, M. (2007). Örgütsel sağlık üzerinde liderlik stillerinin etkisi. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 13(1), 57-91.
- Koustelios, A. D. (2001). Personal characteristics and job satisfaction of Greek teachers. *International Journal of Educational Management*, 15(7), 354-358.
- Kreitner, R., & Kinicki, A. (1998). *Organizational behaviour*. Boston: Irwin McGraw Hill.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4), 309-336.
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *International Journal of Nursing Studies*, 42(2), 211-227.
- Luthans, F. (2010). *Organizational behavior: An evidence-based approach*. United State: McGraw Hill.
- Ma, X., & MacMillan, R. (1999). Influences of workplace conditions on teachers' job satisfaction. *The Journal of Educational Research*, 93(1), 39-47.
- Mamatoğlu, N. (2008). Öğretmenlerde Kimliklenme ve Kimliklenmenin İşe Yönelik Tutum ve Algıları Yordayıcılığı. *Türk Psikoloji Yazıları*, 11(22), 47-62.
- Matiasko, W., & Grözinger, G. (2011). Introduction: job satisfaction revisited. *Management Revue*, 22(1), 5-7.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. doi: 10.1037/h0054346
- Oakley, A. (2002). Social science and evidence-based everything: the case of education. *Educational Review*, 54(3), 277-286.
- Okçu, V., & Çetin, H. (2017). Investigating the relationship among the level of mobbing experience, job satisfaction and burnout levels of primary and secondary school teachers. *Universal Journal of Educational Research*, 5(1), 148-161. doi: 10.13189/ujer.2017.050119
- Ololube, N. P. (2006). Teachers job satisfaction and motivation for school effectiveness: an assessment. *ERIC Online Submission*.
- Ordu, A. (2016). The effects of diversity management on job satisfaction and individual performance of teachers. *Educational Research and Reviews*, 11(3), 105-112. doi: 10.5897/ERR2015.2573
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 2-21.
- Savaş, A. C. (2012). Okul müdürlerinin duygusal zekâ ve duygusal emek yeterliklerinin, öğretmenlerin iş doyumunu düzeylerine etkisi. *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 33, 139-148.

- Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education, 25*(3), 518-524.
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education, 27*(6), 1029-1038.
- Somech, A., & Drach-Zahavy, A. (2000). Understanding extra-role behavior in schools: The relationships between job satisfaction, sense of efficacy, and teachers' extra-role behavior. *Teaching and Teacher Education, 16*(5-6), 649-659.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences*. UK: Sage Publications.
- Sesen, H., Tabak, A., & Arli, O. (2017). Consequences of self-leadership: A study on primary school teachers. *Educational Sciences: Theory & Practice, 17*(3), 945-968. doi:10.12738/estp.2017.3.0520
- Tabancali, E. (2016). The relationship between teachers' job satisfaction and loneliness at the workplace. *Eurasian Journal of Educational Research, 66*, 263-280. doi:10.14689/ejer.2016.66.15
- Tan, Ç. (2012). İlköğretim okul yöneticilerinin takım liderlik davranışlarının öğretmenlerin iş doyumunu, örgütsel adanmışlık ve örgütsel vatandaşlık düzeylerine etkisi. *Ekev Akademi Dergisi, 20*(68), 66-80.
- Taş, S. (2017). The effect of vocational high school administrators' leadership behaviors on teacher job satisfaction. *Universal Journal of Educational Research, 5*(11), 2092-2100, doi: 10.13189/ujer.2017.051126
- Taylor, D., & Tashakkori, A. (1995). Decision participation and school climate as predictors of job satisfaction and teachers' sense of efficacy. *The Journal of Experimental Education, 63*(3), 217-230.
- Tella, A., Ayeni, C. O., & Popoola, S. O. (2007). Work motivation, job satisfaction, and organisational commitment of library personnel in academic and research libraries in Oyo State, Nigeria. *Library Philosophy and Practice (e-journal)*, 118, 1-16.
- Türkoğlu, M., E., Cansoy, R. & Parlar, H. (2017). Examining relationship between teachers' self-efficacy and job satisfaction. *Universal Journal of Educational Research, 5*(5), 765-772, doi: 10.13189/ujer.2017.050509
- Utriainen, K., & Kyngäs, H. (2009). Hospital nurses' job satisfaction: a literature review. *Journal of Nursing Management, 17*(8), 1002-1010.
- Uzun, T., & Özdem, G. (2017). The mediating role of job satisfaction on the relationship between teachers' perceptions of supervisor support and job performances. *International Journal of Educational Administration and Policy Studies, 9*(7), 84-90. doi: 10.5897/IJEAPS2017.0519
- Van Houtte, M. (2006). Tracking and teacher satisfaction: Role of study culture and trust. *The Journal of Educational Research, 99*(4), 247-254.
- Yılmaz, K., & Altinkurt, Y. (2012). Okul yöneticilerinin kullandıkları güç kaynakları ile öğretmenlerin iş doyumunu arasındaki ilişki. *Kastamonu Eğitim Dergisi, 20*(2), 385-402.
- Yılmaz, E. (2009). Examining organizational commitment of primary school teachers regarding to their job satisfaction and their school's organizational creativity. *Elementary Education Online, 8*(2), 476-484.

Yılmaz, E., & Izgar, H. (2009). Examination of primary school teachers' job satisfaction with regards to organizational creativity within a school context. *Elementary Education Online*, 8(3), 943-951.