

2021

The Relationship between Change Fatigue and Job Satisfaction of Teachers: Gender and Experience as Moderators

İbrahim Limon

Sakarya Mithatpaşa Anadolu Lisesi, ibomon@gmail.com

Ümit Dilekçi

Batman University, umit.dilekci@batman.edu.tr

Mete Sipahioğlu

Samsun University, metesipahioglu@gmail.com

Follow this and additional works at: <https://digitalcommons.nl.edu/ie>

Recommended Citation

Limon, İbrahim; Dilekçi, Ümit; and Sipahioğlu, Mete. (2021). The Relationship between Change Fatigue and Job Satisfaction of Teachers: Gender and Experience as Moderators. *i.e.: inquiry in education: Vol. 13: Iss. 2, Article 5*.

Retrieved from: <https://digitalcommons.nl.edu/ie/vol13/iss2/5>

Copyright © 2021 by the author(s)

i.e.: inquiry in education is published by the Center for Inquiry in Education, National-Louis University, Chicago, IL.

The Relationship between Change Fatigue and Job Satisfaction of Teachers: Gender and Experience as Moderators

Cover Page Footnote

Dear editor; We included a reference to support discarding the "Undecided" option and the unequal distances between options (Chyung, S.Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-Based Survey Design: The Use of a Midpoint on the Likert Scale. *Performance Improvement*, 56(10), 15-23. doi: 10.1002/pfi.21727) this reference suggest that the difference between options (a-b,b-c,c-d) may be unequal. Thank you.

The Relationship Between Change Fatigue and Teacher Job Satisfaction: Gender and Experience as Moderators

İbrahim Limon

Sakarya Mithatpaşa Anatolian High School

Ümit Dilekçi

Batman University

Mete Sipahioğlu

Samsun University

Abstract

This study investigates the relationship between change fatigue and job satisfaction. It also aims to test the moderator roles of gender and experience in this relationship. To this end, we conducted an online data collection procedure during the 2020–2021 academic year. Participants were recruited through convenient sampling, and they worked in different parts of Turkey. In all, 379 teachers participated in the study voluntarily. The PROCESS macro was used to test the moderator roles of gender and experience. The findings showed that change fatigue and job satisfaction were negatively correlated. While gender moderated the relationship between change fatigue and job satisfaction, experience did not. The findings were discussed based on previous literature, and some suggestions were presented.

Keywords: Change fatigue, job satisfaction, gender, experience, moderation.

Introduction

The concept that best describes the age we are in is change. Rapid changes are taking place in all areas of life; education systems also feel the need to constantly renew themselves by keeping up with this change. Different countries are launching many reform initiatives to make schools more effective (Aksit, 2007; Dilkes et al., 2014; Ibrahim et al., 2013; Thoonen et al., 2011; Vandeyar, 2017). However, these reform initiatives create some difficulties for the stakeholders practicing them (Helvacı & Kılıçoğlu, 2018; Snyder, 2017). Specifically, the perception that change is repeated too often can increase the possible negative consequences (Huy, 2001, cited by Bernerth et al., 2011). In this context, the concept of *change fatigue* has come to the fore recently in the literature (Ace & Parker, 2010; Beaudan, 2006; Brown et al., 2018; Dilkes et al., 2014; Garside, 2004; Orlando, 2014; Vestal, 2013).

To manage organizational change successfully, organizations should consider the steps of change and put the changes into practice accordingly (Fernandez & Rainey, 2006). Lewin (1947) was a leading researcher in change literature and divided change in organizations into three stages: unfreezing, changing, and

refreezing. In Lewin's model, which reigned in the organizational change literature for a very long time, the change process can be compared to a ziggurat pyramid. However, in today's dynamic environment, change is constant and can be compared to a pyramid (Winter, 2013), which can be regarded as one of the main sources of change fatigue. On the other hand, Kotter (1996) suggested an eight-stage process for successful change. These stages are establishing a sense of urgency, creating the guiding coalition, developing a vision and strategy, communicating the change vision, empowering broad-based action, generating short-term wins, consolidating gains and producing more change, and anchoring new approaches in the culture. Organizations may experience a smoother change process by considering the principles above.

In his influential book *Leading Change*, Kotter (1996) anticipated that organizations would feel a growing pressure to transform themselves due to an increasing environmental movement. The findings in the literature suggest that change fatigue has become widespread recently in educational organizations (Deschenes, 2019; Dilkes et al., 2014; Kennedy, 2010; Limon, 2019; Nunnally, 2016), which confirms Kotter's anticipation. The findings in the literature also show that change fatigue has some unfavorable outcomes. For example, Limon (2019) found that it is positively associated with teacher demoralization while negatively associated with job performance. It may also hinder the successful implementation of educational reforms (Dilkes et al., 2014). The frequent repetition of reform initiatives may direct teachers' attention to efforts to keep up with the innovations brought by the reforms rather than the content they will teach (Kennedy, 2010). Thus, teachers' experience of change fatigue can be seen as a threat to reforms whose purpose is to increase the quality of teaching.

The Turkish educational system has recently witnessed frequent reform initiatives, which stakeholders have regarded as one of the weaknesses of the system (Güven & Güven, 2019). An atmosphere of continuous change in the system can cause significant problems for stakeholders, and new initiatives are introduced before the existing ones are completed (Örücü, 2014; Taşdemir, 2015). A recent study showed that Turkish teachers were change-fatigued (Limon & Sezgin-Nartgün, 2020), which means that the situation should be investigated more thoroughly. Although it has important implications at both organizational and individual levels, change fatigue has not been adequately addressed in the context of educational organizations. In this context, associating change fatigue with different variables may contribute to the organizational change literature. Additionally, the findings to be revealed may have important implications for both policymakers and education managers in terms of change management. This study aims to reveal the relationship between change fatigue and job satisfaction of teachers, which is one of the key concepts of organizational psychology. It also unearths the moderator roles of gender and experience in this relationship.

Theoretical Framework

Change Fatigue

Change, defined as making a difference (Robbins & Judge, 2012), is necessary for development and innovation (Beycioğlu & Aslan, 2010). This requirement has been kept at the forefront in the development and innovation processes of education systems. Thus, today, change has become a general norm for education systems (Helvacı & Yılmaz, 2020). The change process in the system also influences teachers individually (Leuschke, 2017). However, change initiatives, which are considered to be of great importance for organizations and employees, cannot always be sustained in the desired way and may even result in failure (Pietz, 2019). One of the factors contributing to the failure of change initiatives is “change fatigue,” referring to the perception that too many changes have occurred (Bernerth et al., 2011).

Job Satisfaction

Theories of job satisfaction overlap with motivation theories, which can be classified as early and contemporary theories. The former include Abraham Maslow’s hierarchy of needs, Douglas McGregor’s theory *x* and theory *y*, Frederick Herzberg’s two-factor theory, and McClelland’s theory of needs. Contemporary theories, on the other hand, include expectancy theory, equity theory, reinforcement theory, self-efficacy theory, goal-setting theory, job engagement, and self-determination theory (Robbins & Judge, 2012).

Job satisfaction is defined as a “pleasurable or positive emotional state resulting from the appraisal of one’s job and job experience” (Locke, 1976). Weiss (2002) defined it as employees’ positive or negative appraisals of their jobs. In other words, job satisfaction is related to the good mood and positive emotions of the employee (Moorman, 1993; Robbins & Judge, 2012). Based on these, teacher job satisfaction can be conceptualized as teachers’ affective responses to their teaching roles (Skaalvik & Skaalvik, 2011).

There is an abundance of literature on teachers’ job satisfaction (Judge et al., 2001) associating it with burnout (Skaalvik & Skaalvik, 2009), self-efficacy (Federici & Skaalvik, 2012; Türkoğlu et al., 2017), performance (Büyükgöze & Özdemir, 2017), and so on. Research on teacher job satisfaction is increasing day by day (Sokmen & Kilic, 2019) not only because more teachers leave the profession but also because instability is associated with reduced productivity (Zembylas & Papanastasiou, 2004). Teachers’ job satisfaction is of great importance in terms of the effectiveness, efficiency, and performance of schools (Butt et al., 2005; Crossman & Harris, 2006; Judge et al., 2001; Liu et al., 2021; Skaalvik & Skaalvik, 2011; You et al., 2017) and teachers’ motivation (Skaalvik & Skaalvik, 2011). Thus, organizational effectiveness and competence depend on employees’ willingness and their satisfaction coming from the effort exerted (Altınışık, 1997).

Conceptual Framework

This study sought to investigate the relationship between change fatigue and teacher job satisfaction and the moderator role of experience and gender in this relationship. This section provides the background of these relationships.

Previous research shows that continuous changes in organizations may have an impact on job satisfaction (Dool, 2006; Lau et al., 2002; Nelson & Cooper, 1995; Sikora et al., 2004). Brown et al. (2018) provided empirical evidence that change fatigue is negatively associated with the job satisfaction of nurses. They stated that organizational change as a frequent stressor may cause change fatigue, which in turn leads to a decrease in job satisfaction. On the other hand, Limon (2019) suggested that change fatigue is significantly associated with teachers' demoralization. Based on these studies, we suggest that there is a statistically significant relationship between change fatigue and teachers' job satisfaction.

The role of gender in teachers' job satisfaction is commonly discussed in the literature (Akpınar & Aydın, 2007; Aydın et al., 2012; Klassen & Chiu, 2010; Lassibille & Navarro Gómez, 2020; Saiti & Papadopoulos, 2015; Toropova et al., 2021). For example, Aydın et al. (2012) conducted a meta-analytic study regarding the effect of gender on teachers' job satisfaction including the years 2005 to 2009. The findings showed that Turkish male teachers were more satisfied with their jobs. In another study, Toropova et al. (2021) suggested that female teachers tend to have a higher level of job satisfaction. On the other hand, previous literature has abundantly investigated the association between teachers' gender and reaction to organizational change (Clarke, 1996; Demirtaş, 2012; Gürses & Helvacı, 2011; Helvacı & Yılmaz, 2020; İnandı et al., 2015; Sywelem & Al-Mahdy, 2019). These studies showed that female and male teachers' reactions to change differ significantly. However, specifically in terms of change fatigue, Limon and Sezgin-Nartgün (2020) revealed that gender did not create a statistically significant difference. Building on the previous literature indicating that gender played a significant role in both teachers' job satisfaction and change fatigue, we suggest that it could play a moderator role in the relationship between these two variables.

There is also prevailing literature investigating the effect of teachers' experience (years of teaching) on their job satisfaction (Demirtaş & Ersözülü, 2010; Gu, 2016; Kılıç, 2011; Korukoğlu et al., 2013; Ma & MacMillan, 1999; Toropova et al. 2021) and reactions to change (Akman & Hacıfazlıoğlu, 2019; Demirtaş, 2012; Gürses & Helvacı, 2011; Hargreaves, 2005; Levent, 2016; Limon & Sezgin-Nartgün, 2020). In these studies, Kılıç (2011) revealed that teachers with more experience had a higher level of job satisfaction, while Ma and MacMillan (1999) suggested that more experienced teachers were less satisfied. On the other hand, some other studies found no association between job satisfaction and experience (Gu, 2016; Toropova et al., 2021). As for the relationship between responses to change and experience, the studies indicated that teachers in their early career were more open to and enthusiastic about educational change (Hargreaves, 2005). However, in terms of change fatigue, teachers with less than 10 years of experience had a higher level of fatigue than those with 16 years' experience or more (Limon & Sezgin-Nartgün, 2020). Drawing on the previous literature, we anticipate that teachers' experience could moderate the relationship between change fatigue and job satisfaction.

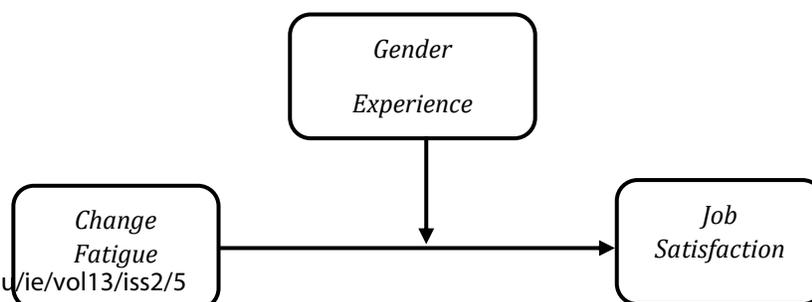


Figure 1. Moderated relationship

Method

This quantitative study employed a cross-sectional survey design investigating the relationship between teachers' change fatigue and job satisfaction. In this section, we provide information about the sample, measures, data collection, and data analysis procedure.

Sample

This study was carried out with the consent of University of Batman Human Research Ethics Committee (Date: November 10, 2020; Issue: 24998744-050.99-). Teachers working in 38 different cities in seven geographical regions of Turkey participated in this study. We reached the participants through a convenience sampling method, in which easily accessible participants are picked (Patton, 2002). The data collection was conducted online. We prepared a link on Google Forms and sent it to school administrators and teachers with whom we are acquainted. They shared the link on their schools' WhatsApp groups. Of the 379 teachers who responded to the scales online, 22 responded wrongly to an attention-check question. So, we discarded them, and the analysis was conducted on the data of 357 teachers. The demographics of participants are presented in Table 1 below.

Table 1. Demographics of participants

Variable	Group	Frequency	%
Gender	Female	207	58.0
	Male	150	42.0
School level	Pre-school	5	1.4
	Primary	50	14.0
	Elementary	209	58.5
	High school	72	20.2
	Other	21	5.9
Experience	0-10 years	136	38.1
	11-20 years	152	42.6
	21 and above	69	19.3
Graduation	Graduate	91	25.5

	Undergraduate	266	74.5
School type	State schools	348	97.5
	Private schools	9	2.5

Measures

We used two different scales to collect data: the “Change Fatigue Scale” and the “Job Satisfaction Scale”.

Change Fatigue Scale

The scale was developed by Bernerth et al. (2011) and adapted into Turkish for educational organizations by Limon (2020). This is a unidimensional scale consisting of six items. The items measure the perceptions of the frequency and excessiveness of changes taking place in the Turkish educational system. The scale has a five-point response range, and the responses are as follows: (1) Strongly disagree, (2) Disagree, (3) Undecided, (4) Agree, and (5) Strongly agree. The scale was reported as having high reliability and validity (Limon, 2020). However, we conducted a confirmatory factor analysis on our data and re-evaluated the reliability of the scale. First, we checked factor loadings that can be deemed satisfactory (CF1 = .494; CF2 = .661; CF3 = .652; CF4 = .886; CF5 = .904; CF6 = .516). The fit indices of the scale resulted in a satisfactory fit ($\chi^2/df = 1.814$; $p = .106$; GFI = .992; AGFI = .965; NNFI = .989; CFI = .996; RMSEA = .048; SRMR = .019). As for reliability, we calculated Cronbach’s alpha, which was .886, indicating internal consistency of the scale.

The scale items are listed below:

- *Too many change initiatives are introduced in our education system.*
- *I am tired of all these changes taking place in our education system.*
- *The changes taking place in our education system are overwhelming.*
- *We, as teachers, are asked to change too many things at school.*
- *I feel like being asked to change something continuously as a teacher.*
- *I want to see a period of stability before a new change is initiated in our education system.*

Job Satisfaction Scale

To measure teachers’ job satisfaction level, we used the short form of the Job Satisfaction Scale. The scale was developed by Brayfield & Rothe (1951) and later shortened by Judge et al. (1998). It was adapted for Turkish culture by Keser and Bilir (2019) and has five items loading on a single dimension. The items measure employees’ levels of satisfaction in their jobs. The response range of the items is as follows: (1) Strongly disagree, (2) Disagree, (3) Neither agree nor disagree, (4) Agree, and (5) Strongly agree. Keser and Bilir (2019) reported the scale as having high reliability and validity. However, within the scope of the current study, we conducted a confirmatory factor analysis and calculated Cronbach’s alpha coefficient. The factor loadings of the items were satisfactory (JS1 = .640; JS2 = .790; JS3 = .421; JS4 = .917; JS5 = .750). The fit indices of the scale were $\chi^2/df = 1.168$; $p = .311$; GFI = .997; AGFI = .981; NNFI = .998; CFI = 1.00; RMSEA = .022; and SRMR = .009, indicating perfect fit. Cronbach’s alpha internal consistency was .847, which can be deemed satisfactory.

The scale items are listed below:

- *I am quite satisfied with my current job.*
- *I eagerly go to work on most days.*
- *I feel as if my workdays would not end. (Reverse coded)*
- *I find my job entertaining.*
- *I find my job unpleasant. (Reverse coded)*

Data Analysis

The data were analyzed using SPSS 25 (Arbuckle, 2019) and the PROCESS macro plugin for SPSS (Hayes, 2013). Initially, the dataset was scanned for missing values, and we found none. Second, we transformed three “Undecided” responses into missing values for the change fatigue scale. The literature states that the midpoint, “Undecided,” represents the absence of opinion, and the distances between two consecutive points on the Likert scale (“a,” “b,” “c,” and “d”) may be different (Chyung et al., 2017). Based on this, we discarded the midpoint and treated the scale as a four-point one. Third, we checked the distribution of the data through skewness and kurtosis coefficients. The coefficients of skewness were -1.057 (SE = .129) for change fatigue and -.773 (SE = .129) for job satisfaction. As for kurtosis, it was .636 (SE = .257) for change fatigue and .734 (SE = .257) for job satisfaction. Based on these findings, the data met the univariate normality assumption (Field, 2009). In the scope of descriptive statistics, we presented minimum, maximum, arithmetic means, and standard deviations. To reveal the relationship between variables, we calculated Pearson’s Product Moment Correlation Coefficient (r).

To test the moderator roles of gender and teaching experience on the relationship between change fatigue and job satisfaction, we employed Model 1 from Hayes (2013). The moderation analysis was conducted separately for gender and experience. We coded male as (0) and female (1) for gender. As for experience, we coded 0–10 years of experience as (1), 11–20 years of experience (2), and 21 and over (3) to conduct the analysis. Also, we used the mean scores of change fatigue and job satisfaction in the model since moderation analysis is based on linear regression (Hayes, 2013). We present simple slopes to visualize the moderating effect.

Findings

In this section, we provide findings regarding descriptive statistics, a correlation between variables, and moderation analysis.

Table 2. Descriptives and correlation between variables

Variable	Descriptives					Correlation	
	N	Min.	Max.	Mean	SD	1	2
CF	357	1.17	5.00	3.90	.85	1.00	
JS		1.00	5.00	3.80	.74	-.20**	1.00

** $p < .01$

As Table 2 shows, teachers' change fatigue level was $M = 3.90$ ($SD = .85$), which shows that participating teachers were fatigued at the "Agree" level. On the other hand, the mean score for job satisfaction was $M = 3.80$ ($SD = .74$), indicating that teachers were satisfied with their job at the "Agree" level as well. Additionally, there was a statistically significant negative correlation between change fatigue and job satisfaction ($r = -.20$; $p < .01$).

Table 3. Moderator effect of gender

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.2315	.0536	.5331	6.6658	3.0000	353.0000	.0002
Model 1						
	Coefficient	se	t	p	LLCI	ULCI
Constant	5.7147	.5711	10.0068	.0000	4.5915	6.8378
CF	-.4535	.1428	-3.1753	.0016	-.7343	-.1726
Gender	-.8353	.33639	-2.2957	.0223	-1.5510	-.1197
Interaction_1	.1897	.0910	2.0782	.0384	.0102	.3682
Test of highest order interaction						
	R² change	F	df1	df2	p	
CF*Gender	.0116	4.3191	1.0000	353.0000	.0384	
Conditional effects of the focal predictor at values of the moderator						
	Effect	se	t	p	LLCI	ULCI
Female	-.2673	.0635	-4.1600	.0000	-.3892	-.1393
Male	-.0751	.0652	-1.1518	.2502	-.2033	.0531

As Table 3 shows, the model suggested was significant ($R^2 = .0536$; $p = .0002$), and gender moderated the relationship between change fatigue and job satisfaction ($\beta = .1897$; $p = .0384$) with ΔR^2 of .0116. The conditional effect of the focal predictor for females was significant ($\beta = -.2673$, 95% CI [-.3892; .1393 not including zero]), while it was not for males ($\beta = -.0751$, 95% CI [-.2033; .0531 including zero]). Figure 2 displays a graphical representation of this interaction, showing a clear difference in the slopes of change fatigue and job satisfaction by gender. The figure shows that females had a higher job satisfaction than males at lower levels of change fatigue, while they had a lower level of job satisfaction at a higher level of change fatigue than their counterparts.

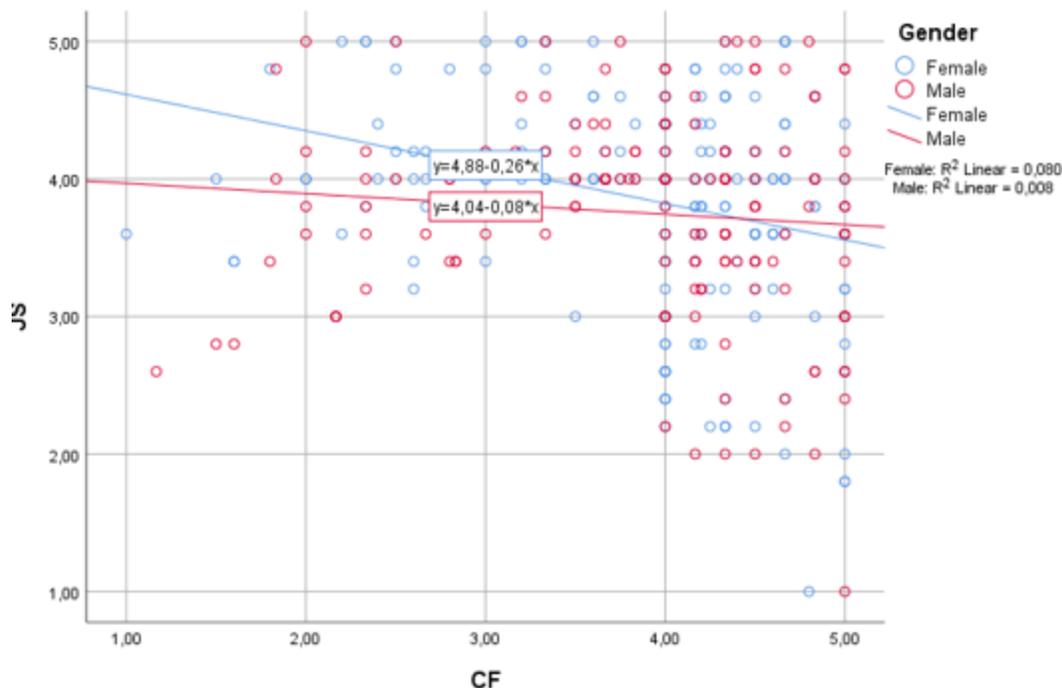


Figure 2. Simple slope by gender

Table 4. Moderator effect of experience

Model Summary							
R	R-sq	MSE	F	df1	df2	p	
.1968	.0387	.5415	4.7385	3.0000	353.0000	.0030	
Model 1							
	Coefficient	se	t	p	LLCI	ULCI	
Constant	4.5818	.4648	9.8584	.0000	3.6677	5.4958	
CF	-.1871	.1164	-1.6072	.1089	-.4162	.0419	
Experience	-.0528	.2082	-.2537	.2999	-.1624	.3567	
Interaction_1	.0077	.0522	.1484	.8821	-.0949	.1104	
Test of highest order interaction							
	R ² change	F	df1	df2	p		
CF*Experience	.0001	.0220	1.0000	353.0000	.8821		

Table 4 presents the findings regarding the moderating effect of teachers' experience on the relationship between change fatigue and job satisfaction, which was a significant model ($R^2 = .0387$; $p = .0030$).

However, experience did not moderate the relationship between change fatigue and job satisfaction ($\beta = .0077$; $p = .0522$) with ΔR^2 of .0001. Figure 3 displays the graphical representation of this interaction, showing that there was not a significant difference in the slopes of change fatigue and job satisfaction by experience. Thus, the level of job satisfaction did not show a significant difference at lower or higher levels of change fatigue by teachers' experience.

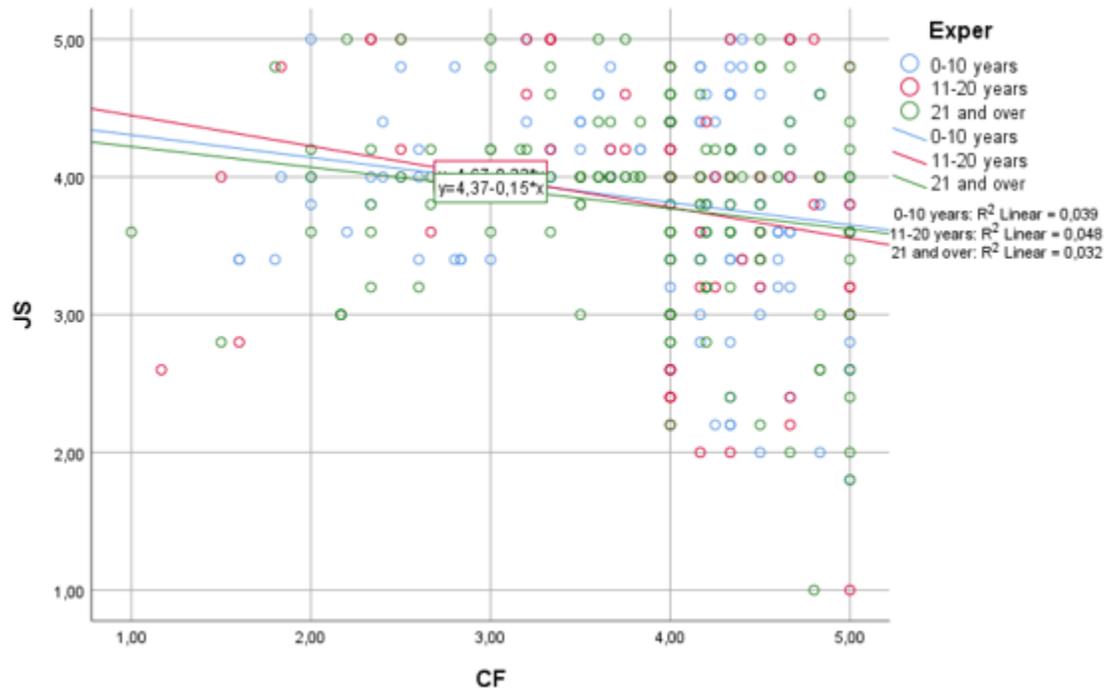


Figure 3. Simple slope by experience

Discussion

This study investigated the relationship between the change fatigue and job satisfaction of teachers, and it also tested the moderator roles of gender and experience on this relationship. First, we examined the descriptive statistics, which, consistent with previous literature, indicated that teachers were change-fatigued (Hargreaves, 2004; Limon & Sezgin-Nartgün, 2020; Leuschke, 2017). Change initiatives may yield unfavorable results both for organizations and employees (Pietz, 2019), especially when they are perceived as highly frequent (Limon, 2020). Teachers' perception that the changes occur more frequently than necessary is thought to be the source of change fatigue (Bernerth et al., 2011). This finding is of great importance because change fatigue triggers the feeling of weakness and intention to leave (McMillan & Perron, 2013), and it also leads to a decrease in organizational performance (Pietz, 2019). Thus, the quality of change initiatives is more important than their quantity in terms of effectiveness. On the other hand, another factor to consider during the educational change process is teachers who are directly affected by change attempts. Thus, Hargreaves (2004) suggests that teachers had positive emotional experiences with changes they initiated on their own, while they had negative attitudes toward imposed change, which indicates that change initiatives should consider the people who will practice them.

Second, the current study suggests that teachers' job satisfaction level was "moderately high." However, there are inconsistent findings in the literature. While some of them are consistent with the current study (Collie et al., 2012; Sokmen & Kilic, 2019; Yerdelen, 2013), others found teachers' job satisfaction to be low (Cerit, 2009; Çetin, 2016). Job satisfaction is a predictor of teachers' performance (Büyükgöze & Özdemir, 2017), organizational success (Skaalvik & Skaalvik, 2011; You et al., 2017), and self-efficacy (Federici & Skaalvik, 2012). Therefore, school leaders should create an environment in which teachers feel satisfied.

This study also investigated the relationship between teachers' job satisfaction and change fatigue levels. Job satisfaction refers to employees' positive feelings about their jobs (Robbins & Judge, 2012), while change fatigue denotes the negative effects that change can have on employees (Leuschke, 2017). The findings suggest that there is a negative significant relationship between change fatigue and job satisfaction. In other words, the more teachers are change-fatigued, the less satisfied they are with their jobs, or vice versa. This finding is consistent with previous literature (Brown, 2016; Brown et al., 2018; Dool, 2006; Jimmieson et al., 2004; Nelson & Cooper, 1995). In addition to job satisfaction, change fatigue is also associated with teachers' job performance and demoralization (Limon, 2019), their emotional exhaustion (Bernerth et al., 2011), and school culture (Leuschke, 2017). It also hinders the use of technology (Orlando, 2014). Organizational change may create pressure on employees. When teachers perceive change initiatives in terms of both quantity and sphere of influence, negative outcomes may result (Bernerth et al., 2011; Limon & Sezgin-Nartgün, 2020). In this sense, this study suggests that change fatigue may result in a decrease in job satisfaction. Since job satisfaction is directly associated with outcomes in educational organizations (Lee, 2006), this finding holds great importance. However, conducting the change process based on the basic principles of change management can minimize undesired outcomes (Dilkes et al., 2014).

The findings reveal that gender had a moderating role in the relationship between change fatigue and job satisfaction. As female teachers' levels of change fatigue increased, their job satisfaction levels were affected more negatively compared to male teachers. Male teachers' job satisfaction levels did not differ significantly for different levels of change fatigue. Previous literature has shown that gender may create a significant difference in the perception of change (Akpınar & Aydın, 2007). Gender may also create a significant difference in job satisfaction (Aydın et al. 2012; Filiz, 2014). However, a thorough literature review did not yield a study investigating the moderator role of gender on the relationship between change fatigue and job satisfaction. Along with their professional responsibilities, female teachers also have more family responsibilities than their male counterparts, which may adversely affect their work life (Polat, 2018). Considering this, female teachers may feel a lower level of job satisfaction when they have to cope with highly frequent change initiatives. Frequent change initiatives also increase uncertainty (Bordia et al., 2004; Karakuş & Yardım, 2014). Uncertainty, which is described as one of the most challenging situations for employees (Dinçman & Koşar, 2016), can be perceived differently by male and female teachers (Yavuz, 2019). This finding may also be attributed to gender roles in Turkish society since femininity has been associated with a fragile nature, while masculinity, with a fighting nature (Topuz & Erkanlı, 2016). Thus, male teachers may tend to report less change fatigue because it could be deemed as a weakness.

The study also found that teaching experience did not moderate the relationship between change fatigue and job satisfaction. In other words, the relationship between change fatigue and job satisfaction did not differ by experience. Previous literature indicates that experience does not create a significant difference in change fatigue (Brown et al., 2018; Rafferty & Griffin, 2006). There are also studies revealing that it does not create a significant difference in job satisfaction (Crossman & Harris, 2006). On the other hand, to our

knowledge, this is the first study investigating the moderator role of experience on the relationship between change fatigue and job satisfaction. Teachers, who are among the most important elements of educational organizations, witness many change initiatives throughout their professional lives. One might think that the change processes experienced may affect teachers' satisfaction from time to time. However, teachers can experience the same level of satisfaction throughout their professional life regardless of changes they have to cope with because teaching is a professional career (Ayдын, 2018). In this context, teachers leave aside the amiable amateur spirit of the teaching profession and display the professional requirements of teaching when necessary.

Conclusion

This study showed that teachers had moderately high levels of both change fatigue and job satisfaction. On the other hand, it found a negative association between change fatigue and job satisfaction. In other words, as change fatigue increased, teachers' job satisfaction decreased, and vice versa. However, we conclude that this negative association was primarily driven by the moderately strong negative correlation for female teachers since the slope of correlation was quite flat for male teachers. Finally, while gender moderated the relationship between change fatigue and job satisfaction, experience did not.

Limitations and Suggestions

This study was carried out within some limitations. First, this is a cross-sectional study that reflects the current situation. Second, the findings regarding change fatigue and job satisfaction are based on self-reported measures, which may lead to social desirability bias. Third, the sample was reached through convenience sampling, and the findings cannot be generalized to a population. The study also employed an online data collection procedure, and this might result in a sampling bias.

Based on the findings, we make the following suggestions. Policymakers should focus on the quality of change initiatives rather than their quantity. Change initiatives should aim for the long term, and their consequences should be followed carefully. On the other hand, researchers may carry out research employing a qualitative design to have a deeper insight into change fatigue. Further research should also examine higher education organizations.

İbrahim Limon, PhD, currently works as an English teacher at Sakarya Mithatpaşa Anatolian High School and a part-time lecturer at İstanbul Medipol University. His research interests include educational policy, educational management, and educational leadership.

Ümit Dilekçi, PhD, currently works as an Associate Professor in Batman University, Turkey. His areas of research include organizational behavior, educational leadership, and school administration. He has published a great number of articles in peer-reviewed journals and contributed to four book chapters.

Mete Sipahiođlu, PhD, is a lecturer and the Coordinator of the International Relations Office, Samsun University, Turkey. His major research interests lie in the area of teacher education, educational administration and policies, and the internalization of higher education institutions.

References

- Ace, W., & Parker, S. (2010). Overcoming change fatigue through focused employee engagement. *OD Practitioner*, 42(1), 21–25.
- Akman, A., & Hacifazlıođlu, Ö. (2019). Examining the causes of the primary school teachers resistance to change. *Turkish Educational Sciences*, 14(6), 2819–2840. <https://doi.org/10.29228/TurkishStudies.30177>
- Akpınar, B., & Aydın, K. (2007). Eđitimde deđişim ve öđretmenlerin deđişim algıları [Change in education and teachers' perceptions of change]. *Eđitim ve Bilim* [Education and Science], 32(144), 71–80.
- Aksit, N. (2007). Educational reform in Turkey. *International Journal of Educational Development*, 27, 129–137. <https://doi.org/10.1016/j.ijedudev.2006.07.011>
- Altınışık, S. (1997). Örgütsel etkililikte iş doyumunun etkisi [The effect of job satisfaction on organizational effectiveness]. *Eđitim Yönetimi* [Educational Administration], 3(2), 135–153.
- Arbuckle, J. L. (2019). *IBM SPSS Amos 20 user's guide*. IBM Corporation.
- Aydın, A., Uysal, Ş., & Sarier, Y. (2012). The effect of gender on job satisfaction of teachers: A meta-analysis study. *Procedia—Social and Behavioral Sciences*, 46, 356–362. <https://doi.org/10.1016/j.sbspro.2012.05.122>
- Aydın, İ. (2018). Öđretmenlik kariyer evreleri ve öđretmenlerin mesleki gelişimi [Teacher career cycles and teacher professional development]. *Journal of Human Sciences*, 15(4), 2047–2065. <https://doi.org/10.14687/jhs.v15i4.5450>

- Beaudan, E. (2006). Making change last: How to get beyond change fatigue. *Strategic Direction*, 22(7), 1–7. <https://doi.org/10.1108/sd.2006.05622gad.010>
- Bernerth, J. B., Walker, H. J., & Harris, S. G. (2011). Change fatigue development and initial validation of a new measure. *Work & Stress*, 25(4), 321–337. <https://doi.org/10.1080/02678373.2011.634280>
- Beycioğlu, K., & Aslan, M. (2010). Okul gelişiminde temel dinamik olarak değişim ve yenileşme: Okul yöneticileri ve öğretmenlerin rolleri [Change and innovation as main dynamics in school development: Administrators and teachers' roles]. *Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi* [YYU Journal of Education Faculty], 6(2), 153-173..
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. J. (2004). Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18, 507–532.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 307–311.
- Brown, R. (2016). *Determining the relationship among change fatigue, resilience, and job satisfaction of hospital staff nurses* (Unpublished doctoral dissertation). South Dakota State University.
- Brown, R., Wey, H., & Foland, K. (2018). The relationship among change fatigue, resilience, and job satisfaction of hospital staff nurses. *Journal of Nursing Scholarship*, 50(3), 306–313. <https://doi.org/10.1111/jnu.12373>
- Butt, G., Lance, A., Fielding, A., Gunter, H., Rayner, S., & Thomas, H. (2005). Teacher job satisfaction: Lessons from the TSW Pathfinder Project. *School Leadership & Management*, 25(5), 455–471. <https://doi.org/10.1080/13634230500340807>
- Büyükgoze, H., & Özdemir, M. (2017). İş doyumunu ile öğretmen performansı ilişkisinin Duygusal Olaylar Kuramı çerçevesinde incelenmesi [Examining job satisfaction and teacher performance within affective events theory]. *İnönü Üniversitesi Eğitim Fakültesi Dergisi* [Inönü University Journal of the Faculty of Education], 18(1), 311–325. <https://doi.org/10.17679/inuefd.307041>

- Cerit, Y. (2009). The effects of servant leadership behaviours of school principals on teachers' job satisfaction. *Educational Management Administration & Leadership*, 37(5), 600–623. <https://doi.org/10.1177/1741143209339650>
- Chyung, S. Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-based survey design: The use of a midpoint on the Likert scale. *Performance Improvement*, 56(10), 15–23. <https://doi.org/10.1002/pfi.21727>
- Clarke, J. S. (1996). Faculty receptivity/resistance to change, personal and organizational efficacy, decision deprivation and effectiveness in research universities. *ASHE Annual Meeting Paper*.
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104, 1189–1204. <https://doi.org/10.1037/a0029356>
- Crossman, A., & Harris, P. (2006). Job satisfaction of secondary school teachers. *Educational Management Administration & Leadership*, 34, 29–46. <https://doi.org/10.1177/1741143206059538>
- Çetin, F. (2016). Öğretmenlerin sınıf yönetimi yeterlikleri, öğretmenlik mesleğine yönelik tutumları ve iş doyumları arasındaki ilişki [The relationship between the classroom management competence of teachers and their attitudes toward the profession of teaching and job satisfaction]. *Electronic Turkish Studies*, 11(3), 791–808. <https://doi.org/10.7827/TurkishStudies.9285>
- Demirtaş, H. (2012). Primary schools' openness to change. *Elementary Education Online*, 11(1), 18–34.
- Demirtaş, Z., & Ersözlü, A. (2010). Liselerde görev yapan öğretmenlerin iş doyumları düzeyleri [Job satisfaction levels of teachers working in high schools]. *e-Journal of New World Sciences Academy*, 5(1), 199–209.
- Deschenes, S. (2019). *Change fatigue and leadership influences* (Unpublished master's thesis). Middle Tennessee State University.
- Dilkes, J., Cunningham, C., & Gray, J. (2014). The new Australian curriculum, teachers, and change fatigue. *Australian Journal of Teacher Education*, 39(11), 45–64. <https://doi.org/10.14221/ajte.2014v39n11.4>

- Dinçman, M. P., & Koşar, D. (2016). Analysis of scientific papers on organizational uncertainty in education and school administration (1990–2016). In Ş.Ş. Erçetin (Ed.), *Chaos, complexity, and leadership 2016* (pp. 407–441). Springer.
- Dool, R. (2006). *The impact of persistent change initiatives on job satisfaction* (Unpublished doctoral dissertation). University of Maryland.
- Federici, R. A., & Skaalvik, E. M. (2012). Principal self-efficacy: Relations with burnout, job satisfaction, and motivation to quit. *Social Psychology of Education*, 15, 295–320. <https://doi.org/10.1007/s11218-012-9183-5>
- Fernandez, S., & Rainey, H. G. (2006). Managing successful organizational change in the public sector. *Public Administration Review*, 66(2), 168–176. <https://doi.org/10.1111/j.1540-6210.2006.00570.x>
- Field, A. (2009). *Discovering statistics using SPSS*. Sage Publications.
- Filiz, Z. (2014). Öğretmenlerin iş doyum ve tükenmişlik düzeylerinin incelenmesi [An analysis of the levels of job satisfaction and burnout of teachers]. *Uluslararası Yönetim İktisat ve İşletme Dergisi* [International Journal of Management Economics and Business], 10(23), 157–172.
- Garside, P. (2004). Are we suffering from change fatigue? *BMJ Quality & Safety*, 13, 89–90. <http://doi.org/10.1136/qshc.2003.009159>
- Gu, X. (2016). *Teacher job satisfaction in public schools: The relation to the years of teaching experience* (Unpublished master's thesis). State University of New York.
- Gürses, G., & Helvacı, M. A. (2011). The causes of the resistance against changes by the teachers in schools. *International Journal of Human Sciences*, 8(1), 1540–1563.
- Güven, S., & Güven, B. (2019). Türk eğitim sisteminin değerlendirilmesi, sorunları, güçlü ve zayıf yönlerine ilişkin öğretmen görüşleri [Teachers' opinions about the evaluation, problems, strengths and weaknesses of the Turkish education system]. *ULEAD 2019 Annual Congress: ICRE*.

- Hargreaves, A. (2004). Inclusive and exclusive educational change: Emotional responses of teachers and implications for leadership. *School Leadership & Management*, 24(2), 287–309. <https://doi.org/10.1080/1363243042000266936>
- Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. *Teaching and Teacher Education*, 21, 967–983. <https://doi.org/10.1016/j.tate.2005.06.007>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis. A regression-based approach*. The Guilford Press.
- Helvacı, M. A., & Kılıçoğlu, A. (2018). The relationship between the organizational change cynicism and organizational commitment of teachers. *Journal of Education and Training Studies*, 6(11a), 105–110. <https://doi.org/10.11114/jets.v6i11a.3806>
- Helvacı, M. A., & Yılmaz, H. K. (2020). The relationship between the emotion management competencies of school principals during a change process and organizational change cynicism levels of teachers. *European Journal of Education Studies*, 7(8), 74–101.
- Ibrahim, A., Al Kaabi, A., & El Zaatari, W. (2013). Teacher resistance to educational change in the United Arab Emirates. *International Journal of Research Studies in Education*, 2(3), 25–36. <https://doi.org/10.5861/ijrse.2013.254>
- İnandı, Y., Yeşil, H., Karatepe, R., & Uzun, A. (2015). Öğretmenlerin ve okul müdürlerinin özyeterlilikleri ile değişime gösterdikleri direnç arasındaki ilişkinin incelenmesi [The study of relationship between teachers' and principals' self-efficacy and resistance to change]. *Mersin Üniversitesi Eğitim Fakültesi Dergisi* [Mersin University Journal of the Faculty of Education], 1(2), 563–581.
- Jimmieson, N., Terry, D., & Callan, V. (2004). A longitudinal study of employee adaptation to organizational change: The role of change-related information and change-related self-efficacy. *Journal of Occupational Health Psychology*, 9(1), 11–27. <https://doi.org/10.1037/1076-8998.9.1.11>
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83, 17–34. <https://doi.org/10.1037/0021-9010.83.1.17>

- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376–407. <https://doi.org/10.1037//0033-2909.127.3.376>
- Karakuş, Ş., & Yardım, M. (2014). Algılanan örgütsel değişim, belirsizlik, iş doyumunu ve işten ayrılma niyeti arasındaki ilişkileri [The relationships among perceived organizational change, uncertainty, job satisfaction, and turnover intentions]. *İş ve İnsan Dergisi*[The Journal of Human and Work], 1(1), 21–31.
- Kennedy, M. M. (2010). Attribution error and the quest for teacher quality. *Educational researcher*, 39(8), 591–598. <https://doi.org/10.3102/0013189X10390804>
- Keser, A., & Bilir, Ö. B. (2019). İş tatmini ölçeğinin Türkçe güvenilirlik ve geçerlilik çalışması [Turkish reliability and validity study of job satisfaction scale]. *Kırklareli Üniversitesi Sosyal Bilimler Dergisi* [Kırklareli University Journal of Social Sciences], 3(3), 229–239.
- Kılıç, Ö. S. (2011). *İlköğretim okullarında görev yapan okul müdürü ve öğretmenlerin iş doyumunu (Tokat ili örneği)* [The perception of teachers who work in primary school concerning job satisfaction (A sample of Tokat province)] (Unpublished master's thesis). Selçuk University.
- Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741. <https://doi.org/10.1037/a0019237>
- Korukoğlu, N., Feyzioğlu, B., Özenoğlu Kiremit, H., & Aladağ, E. (2013). Examining teachers' job satisfaction level according to some variables. *Mehmet Akif Ersoy University Journal of Education Faculty*, 13(25), 119–137.
- Kotter, J. P. (1996). *Leading change*. Harvard Business School Press.
- Lassibille, G., & Navarro Gómez, M. L. (2020). Teachers' job satisfaction and gender imbalance at school. *Education Economics*, 28(6), 567–586. <https://doi.org/10.1080/09645292.2020.1811839>

- Lau, C., Tse, D., & Zhou, N. (2002). Institutional forces and organizational culture in China: Effects on change schemas, firm commitment and job satisfaction. *Journal of International Business Studies*, 33(3), 533–550.
- Lee, M. (2006). What makes a difference between two schools? Teacher job satisfaction and educational outcomes. *International Education Journal*, 7(5), 642–650.
- Leuschke, E. E. (2017). *School culture and change fatigue in Tennessee* (Unpublished doctoral dissertation). Middle Tennessee State University.
- Levent, F. (2016). An investigation of the readiness of teachers for change based upon various variables. *Marmara University Atatürk Education Faculty Journal of Educational Sciences*, 43, 117–134.
- Lewin, K. (1947). Group decision and social change. In T. M. Newcomb & E. L. Hartley (Eds.), *Readings in Social Psychology* (pp. 340–344). H. Holt, Rinehart, & Winston.
- Limon, İ. (2019). *Eğitim örgütlerinde değişim yorgunluğu, eğitim politikaları bağlamında moral yitimi ve iş performansı arasındaki ilişki* [The relationship among change fatigue, demoralization in educational policy context, and job performance in educational organizations] (Unpublished doctoral dissertation). Bolu Abant İzzet Baysal University.
- Limon, İ. (2020). Turkish adaptation of change fatigue scale: A study of reliability and validity. *Sakarya University Journal of Education*, 10(2), 292–311. <https://doi.org/10.19126/suje.646463>
- Limon, İ., & Sezgin-Nartgün, Ş. (2020). Investigation of teachers' change fatigue level: Comparison by demographics. *Kuram ve Uygulamada Eğitim Yönetimi* [Educational Administration: Theory and Practice], 26(2), 401–448.
- Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The effect of instructional leadership and distributed leadership on teacher self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, 49(3), 430–453. <https://doi.org/10.1177/1741143220910438>
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1349). Rand McNally.

- Ma, X., & MacMillan, R. B. (1999). Influences of workplace conditions on teachers' job satisfaction. *The Journal of Educational Research*, 93(1), 39–47. <https://doi.org/10.1080/00220679909597627>
- McMillan, K., & Perron, A. (2013). Nurses amidst change: The concept of change fatigue offers an alternative perspective on organizational change. *Policy, Politics & Nursing Practice*, 14(1), 26–32. <https://doi.org/10.1177/1527154413481811>
- Moorman, R. H. (1993). The influence of cognitive and affective based job satisfaction measures on the relationship between satisfaction and organizational citizenship behavior. *Human Relations*, 46(6), 759–776. <https://doi.org/10.1177/001872679304600604>
- Nelson, A., & Cooper, C. (1995). Uncertainty amidst change: The impact of privatization on employee job satisfaction and well-being. *Journal of Occupational & Organizational Psychology*, 68(1), 57–72.
- Nunnally, L. (2016). *Minimizing change fatigue amongst directors and managers through introducing an authentic leadership style at a small university in the southwest United States* (Unpublished doctoral dissertation). University of Liverpool.
- Orlando, J. (2014). Veteran teachers and technology: Change fatigue and knowledge insecurity influence practice. *Teachers and Teaching: Theory and Practice*, 20(4), 427–439. <https://doi.org/10.1080/13540602.2014.881644>
- Örücü, D. (2014). Öğretmen adaylarının okul, okul yönetimi ve Türk eğitim sistemine yönelik metaforik algıları [Pre-service teachers' metaphors towards school, school administrators and Turkish education system]. *Kuram ve Uygulamada Eğitim Yönetimi* [Educational Administration: Theory and Practice], 20(3), 327–358.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Sage Publications.
- Pietz, K. (2019). *Change effort organizational communication effectiveness and work locus of control influence on change fatigue in the workplace* (Unpublished doctoral dissertation). University of Southern Mississippi.
- Polat, Ş. (2018). Kadın öğretmenlerde iş-yaşam dengesi ve iş performansı arasındaki ilişkinin incelenmesi [Examining the relationship between work-life balance and job performance of female teachers].

KADEM Kadın Araştırmaları Dergisi [KADEM Journal of Women's Studies], 4(2), 187–205.
<https://doi.org/10.21798/kadem.2019249085>

Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, 91(5), 1154–1162. <https://doi.org/10.1037/0021-9010.91.5.1154>

Robbins, S. P., & Judge, T. A. (2012). *Örgütsel davranış [Organizational Behavior]* (İ. Erdem, Trans. & Ed.). Nobel Publisher.

Saiti, A., & Papadopoulos, Y. (2015). School teachers' job satisfaction and personal characteristics: A quantitative research study in Greece. *International Journal of Educational Management*, 29(1), 73–97. <https://doi.org/10.1108/IJEM-05-2013-0081>

Sikora, P., Beaty, E., & Forward, J. (2004). Updating theory on organizational stress: The synchronous multiple overlapping change (AMOC) model of workplace stress. *Human Resource Development Review*, 3(1), 3–35. <https://doi.org/10.1177/1534484303261912>

Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25, 518–524. <https://doi.org/10.1016/j.tate.2008.12.006>

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, 1029–1038. <https://doi.org/10.1016/j.tate.2011.04.001>

Snyder, R. R. (2017). Resistance to change among veteran teachers: Providing voice for more effective engagement. *International Journal of Educational Leadership Preparation*, 12(1), 1–14.

Sokmen, Y., & Kilic, D. (2019). The relationship between primary school teachers' self-efficacy, autonomy, job satisfaction, teacher engagement and burnout: A model development study. *International Journal of Research in Education and Science (IJRES)*, 5(2), 709–721.

Sywelem, M. M. G., & Al-Mahdy, Y. F. H. (2019). Exploring teachers' perceptions on schools' openness to change in Omani & Saudi public schools. *Education Quarterly Reviews*, 2(3), 597–607. <https://doi.org/10.31014/aior.1993.02.03.91>

- Taşdemir, M. (2015). Öğretmen adaylarının Türk milli eğitim sistemi üzerine algıladıkları sorunlar [Problems perceived by preservice teachers on the Turkish national education system]. *Turkish Studies (Elektronik)*, 10(7), 881–898. <https://doi.org/10.7827/TurkishStudies.7898>
- Thoonen, E., Slegers, P., Oort, F., Thea, T. D., Peetsma, T., & Geijsel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors and leadership practices. *Educational Administration Quarterly*, 47(3), 496–536. <https://doi.org/10.1177/0013161X11400185>
- Topuz, S. K., & Erkanlı, H. (2016). Metaphor analysis of meanings attributed to women and men in the context gender. *Alternatif politika*, 8(2), 300–321.
- Toropova, A., Myrberg, E., & Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97. <https://doi.org/10.1080/00131911.2019.1705247>
- 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. <https://doi.org/10.13189/ujer.2017.050509>
- Vandeyar, S. (2017). The teacher as an agent of meaningful educational change. *Educational Sciences: Theory & Practice*, 17, 373–393. <https://doi.org/10.12738/estp.2017.2.0314>
- Vestal, K. (2013). Change fatigue: A constant leadership challenge. *Nurse Leader*, 11(5), 10–11. <https://doi.org/10.1016/j.mnl.2013.07.005>
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review*, 12(2), 173–194. [https://doi.org/10.1016/S1053-4822\(02\)00045-1](https://doi.org/10.1016/S1053-4822(02)00045-1)
- Winter, A. J. (2013). *The human cost of change: Tales from the campus about personal change fatigue, resistance, and resilience* (Unpublished Doctoral Dissertation). Queensland University of Technology.

Yavuz, M. (2019). *Okullardaki örgütsel belirsizlik düzeylerinin belirlenmesi* [Determination of organizational uncertainty levels in schools] (Unpublished master's dissertation). Siirt University.

Yerdelen, S. (2013). *Multilevel investigations of students' cognitive and affective learning outcomes and their relationships with perceived classroom learning environment and teacher effectiveness* (Unpublished doctoral dissertation). Middle East Technical University.

You, S., Kim, A. Y., & Lim, S. A. (2017). Job satisfaction among secondary teachers in Korea effects of teachers' sense of efficacy and school culture. *Educational Management Administration & Leadership*, 45(2), 284–297. <https://doi.org/10.1177/1741143215587311>

Zembylas, M., & Papanastasiou, E. (2004). Job satisfaction among school teachers in Cyprus. *Journal of Educational Administration*, 42, 357–374. <https://doi.org/10.1108/09578230410534676>