

Examining the Relationship between Meaningful Work and Job Engagement

Anlamlı İş ve İşle Bütünleşme İlişkisinin İncelenmesi

Erdem KARATAŞ*

Murat ÖZDEMİR**

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ABSTRACT: Ensuring teachers' job engagement is critical in achieving educational goals. This study examined the relationship between meaningful work and job engagement using the data collected from 452 teachers in Turkey. The data collected by using Meaningful Work Scale and Job Engagement Scale Turkish Form were analyzed by descriptive statistics, confirmatory factor analysis, multivariate regression analysis, and moderation analyses. We found a positive, moderate, and significant relationship between meaningful work and job engagement. We tested the predictive effects of meaningful work and demographic variables (gender, seniority, and educational status). Meaningful work explained 47% of the variance in teachers' job engagement in the first model. All subdimensions of meaningful work except for the search for meaning at work and work relations were found to be significant predictors of job engagement. With the inclusion of demographic variables, the second model again explained 47% of the variance in teachers' job engagement. Furthermore, we found that seniority was a significant and positive predictor of job engagement. Moderation analyses indicated gender and educational status did not have a moderator role in the relationship between meaningful work and job engagement. We found that seniority had a moderator effect on the relationship between work relationships and job engagement. This study contributes to meaningful work and job engagement literature in the context of teachers.

Keywords: Meaningful work, job engagement, positive psychology, teacher, motivation.

ÖZ: Eğitimsel amaçların başarılmasında öğretmenlerin işle bütünleşmelerinin sağlanması kritiktir. Bu çalışmada Türkiye'deki 452 öğretmenden toplanan verileri kullanarak anlamlı iş ve işle bütünleşme arasındaki ilişki incelenmiştir. Anlamlı İş Ölçeği ve İşle Bütünleşme Ölçeği Türkçe Formu kullanılarak toplanan veriler, betimsel istatistikler, doğrulayıcı faktör analizi, çok değişkenli regresyon analizi ve moderasyon analizleri ile çözümlenmiştir. Anlamlı iş ile işle bütünleşme arasında pozitif yönlü, orta düzeyde ve anlamlı bir ilişki tespit ettik. Anlamlı işin ve demografik değişkenlerin (cinsiyet, kıdem ve eğitim durumu) yordayıcı etkisini test ettik. Birinci modelde anlamlı iş, öğretmenlerin işle bütünleşmelerindeki varyansın %47'sini açıklamıştır. Anlamlı işin, işte anlam arayışı ve iş ilişkileri dışındaki tüm alt boyutları, işle bütünleşmenin anlamlı yordayıcıları olarak bulunmuştur. Demografik değişkenlerin dahil edilmesi ile ikinci model, öğretmenlerin işle bütünleşmelerindeki varyansın tekrar %47'sini açıklamıştır. Ayrıca kıdem, işle bütünleşmenin anlamlı ve pozitif bir yordayıcısı olduğunu tespit ettik. Moderasyon analizleri, cinsiyet ve eğitim durumunun anlamlı iş ile işle bütünleşme arasındaki ilişkide düzenleyici role sahip olmadığını göstermiştir. İş ilişkileri ile işle bütünleşme arasındaki ilişkide kıdem değişkeninin düzenleyici etkiye sahip olduğunu belirledik. Bu çalışma, öğretmenler bağlamında anlamlı iş ve işle bütünleşme literatürüne katkı sunmaktadır.

Anahtar kelimeler: Anlamlı iş, işle bütünleşme, pozitif psikoloji, öğretmen, motivasyon.

* Corresponding Author: Res. Asst., Kırıkkale University, Kırıkkale, Turkey, erdemkaratas068@gmail.com, <https://orcid.org/0000-0002-7841-4815>

** Prof. Dr., Hacettepe University, Ankara, Turkey, mrtozdem@gmail.com, <https://orcid.org/0000-0002-1166-6831>

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Teachers are principal actors in unlocking and improving the potential of each student in schools. In this context, teachers have vital responsibilities in achieving educational goals and raising future generations (OECD, 2005). In meeting social expectations regarding education, teachers are expected to keep their motivation alive and dedicate themselves to their work (İlğan & Ceviz, 2019; Somech & Ron, 2007). When teachers develop positive attitudes towards their profession, they can transfer all their energies to their work (Granziera & Perera, 2019). In this context, job engagement, which requires transferring physical, mental, and emotional energy to the work roles (Kahn, 1990), comes to the fore for teachers.

Job engagement leads to several psychological and organizational outcomes for teachers (Bakker et al., 2007; Salanova et al., 2006). Teachers with a high level of job engagement experience positive psychological consequences for their inner world (Bakker & Bal, 2010; Hakanen et al., 2006). Job engagement affects teachers' job satisfaction (Granziera & Perera, 2019; Klassen et al., 2012; Salanova et al., 2011; Viseu et al., 2015) and well-being positively (Kang & Yoo, 2019; Klassen et al., 2012; Rusu & Colomeischi, 2020). Job engagement matters in making teachers feel happy, energetic, enthusiastic, and motivated about their work (Bakker & Bal, 2010; Burić & Macuka, 2018; Klassen et al., 2012). Moreover, job engagement reduces negative situations such as weariness, burnout, and related health problems in teachers (Hakanen et al., 2006; Hoigaard et al., 2012; Klassen et al., 2012).

Job engagement improves teachers' job performance from an organizational perspective (Bakker & Bal, 2010; Hakanen et al., 2006; Öncel, 2007). Job engagement plays a role in increasing teachers' organizational commitment (Hakanen et al., 2006; Han et al., 2016), reducing their burnout (Hakanen et al., 2006), and intention to leave (Hoigaard et al., 2012; Öncel, 2007). Teachers engaged in their profession are more likely to achieve educational goals than their peers who experience burnout (Guglielmi & Tatrow, 1998; Rudow, 1999). Job engagement is critical for teachers' potential to influence student achievement (Sethi & Scales, 2020; Valenta, 2010). Teachers who experience job engagement get positive results in improving student achievement (Gordon, 2006; Roth et al., 2007) and are effective in activating curiosity, excitement, energy, and interest among students (Bakker, 2005; Patrick et al., 2000). Thus, teachers' job engagement levels contribute to school effectiveness (Klassen et al., 2012; Koçak & Nartgün, 2020; Parker & Martin, 2009).

Individual and organizational variables contribute to teachers' job engagement (Klusmann et al., 2008). Teacher self-efficacy (Burić & Macuka, 2018; Kavgacı, 2014; Salanova et al., 2006; Simbula et al., 2011; Skaalvik & Skaalvik, 2014), teacher autonomy (Kavgacı, 2014; Victor & Patil, 2016), teacher leadership (İnanır, 2020), and positive psychological capital (Coleman, 2016; Eser, 2018; Price, 2017; Tösten et al., 2019) are among the individual factors that lead to job engagement. The organizational factors that affect teachers' job engagement are school culture (Khan, 2016; Louis & Smith, 1991), school climate (Bakker et al., 2007; Hakanen et al., 2006; İnanır, 2020; Song et al., 2014), organizational justice (Akdeniz & Ottekin Demirbolat, 2019; Köse & Uzun, 2018; Viseu et al., 2015), organizational citizenship (Runhaar et al., 2013), school principal support (Bakker & Demerouti, 2007; Klusmann et al., 2008), and the leadership displayed in the school (Bird et al., 2012; Breevaart & Bakker, 2018; Leonetti, 2019). Furthermore, job resources such as administrative support, social

environment at school, information sharing, innovative atmosphere, and job control increase teachers' job engagement (Hakanen et al., 2006). One of the possible factors that lead to teachers' job engagement can be considered *meaningful work*.

Perceiving one's work as meaningful leads to several potentially positive outcomes, both individually and organizationally (Chaolertseree & Taephant, 2020; Hu & Hirsh, 2017). The implications of meaningful work experience also apply to teachers (Lavy & Bocker, 2018; Steger & Dik, 2010). In terms of individual outcomes, meaningful work affects teachers' motivation, job satisfaction, and well-being (Fouché et al., 2017; Lavy & Bocker, 2018). Meaningful work is essential for making teachers happier, more productive, and more responsible (Fourie & Deacon, 2015). According to Kun and Gadanez (2019), the factors that make teachers happy in schools are social relationships, finding meaning in work, achieving goals, and receiving feedback. Meaningful work supports teachers' self-perceived health and improves their well-being by enabling them to cope better with stressful working conditions (Minkkinen et al., 2020). In organizations that create a meaningful work environment, productivity, creativity, and sense of achievement increase, while stress and absenteeism decrease (Chalofsky, 2010; Lips-Wiersma & Morris, 2018). Meaningful work helps teachers display organizational citizenship behavior (Selamat et al., 2017) and cope with the stress created by a demanding work environment in schools (Månsson & Persson, 2005).

As understood from the literature review, there are various studies on the causes and consequences of teachers' job engagement. While stress, burnout, and intention to leave the job decrease in teachers who feel job engagement, positive psychological feelings such as excitement, happiness, intrinsic motivation, and job satisfaction increase (Bakker & Bal, 2010; Hakanen et al., 2006; Hoigaard et al., 2012). Job engagement is critical in enhancing teachers' work performance and maintaining school effectiveness (Bakker & Bal, 2010; Klassen et al., 2012). Additionally, meaningful work has significant implications for teachers and schools (Fouché et al., 2017; Kun & Gadanez, 2019; Lavy & Bocker, 2018).

Several studies in the literature focus on the link between job engagement and school culture (Khan, 2016; Louis & Smith, 1991), school climate (Bakker et al., 2007; Hakanen et al., 2006; İnanır, 2020; Song et al., 2014), organizational commitment (Özkeskin, 2019), emotional labor (Çarıkçı, 2020), managerial support, transformational leadership (Hakanen et al., 2006; Hoigaard et al., 2012), job satisfaction (Blatný et al., 2018; Granziera & Perera, 2019; Klassen et al., 2012; Salanova et al., 2011; Viseu et al., 2015), personality traits (Blatný et al., 2018), intention to leave (Hoigaard et al., 2012; Öncel, 2007) in educational organizations. On the other hand, some studies examined teachers' level of meaningful work (Akar, 2020; Toptaş, 2018) and how they make sense of the work (Demirkasimoğlu, 2015; Fourie & Deacon, 2015; Koşar, 2019; Willey, 2016). Moreover, studies were conducted on the association between meaningful work and teacher motivation (Fourie & Deacon, 2015), intention to leave (Janik & Rothmann, 2015), work behaviors (Willemse & Deacon, 2015), job satisfaction, and well-being (Fouché et al., 2017; Lavy & Bocker, 2018; Minkkinen et al., 2020). Akar (2020) and Toptaş (2018) found that teachers find their work highly meaningful. In another study by Kavgacı (2014), teachers' job engagement levels were found high. However, studies focusing on the links between meaningful work and job

engagement in educational organizations are limited in literature (Fouché et al., 2017; Van Wingerden & Poell, 2019). The present study is expected to contribute to practice and theory in this context.

Conceptual Framework

Job Engagement

The concept of engagement emerged in business and was first included in Gallup studies in the 1990s (Schaufeli, 2012). The necessity of fostering employee engagement for organizational effectiveness was stressed in related studies (Ferguson & Carstairs, 2005). “Employee engagement,” which has a broader scope, is mainly preferred in business, while “job engagement” is more common in academia (Rich et al., 2010; Schaufeli & Salanova, 2011). Kahn first conceptualized engagement at work and defined personal engagement as “the harnessing of organization members’ selves to their work roles” (1990, p. 694). Based on this definition, Rich et al. (2010, p. 619) defined job engagement as “a multidimensional motivational concept reflecting the simultaneous investment of an individual’s physical, cognitive, and emotional energy in active, full work performance.”

Kahn (1990) defined engagement as individuals adjusting their selves according to the requirements of their roles. Job engagement is the individual’s experience of a psychological existence at work. Schaufeli and Bakker (2010) emphasize that employees who are engaged in a job put a lot of effort into their work as they identify with the job. Kahn (1990) laid the theoretical foundations of job engagement based on Goffman’s (1972) study on role performance. According to Goffman (1972), where there is action, there is interaction, and people can only participate in an interaction if they have a role to play. Within the scope of the job, people adopt the role expected from them in the organization, or they detach themselves from the role performances (Goffman, 1972). In this context, Kahn (1990) based his definition of engagement on Goffman’s (1972) idea of role distance, which states there are differences in an individual’s levels of attachments and detachments in role performances. When individuals achieve engagement, they cognitively, emotionally, and physically involve themselves in the work role performance. Thus, individuals fully engaged in their roles display their true selves. Conversely, individuals separate themselves from their work roles when they fail to engage in the job (Kahn, 1990).

Job engagement means “a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). *Vigor* is defined by a high energy level, work resilience, perseverance when faced with challenges, and a willingness to put effort into one’s work. *Dedication* means a sense of inspiration, pride, importance, passion, and coping with challenges at work. *Absorption* refers to being happy, concentrating fully, and immersing oneself in one’s work by having difficulty disconnecting from work (Schaufeli et al., 2006; Schaufeli et al., 2002).

Kahn (1990) reports that participation in one’s role depends on three psychological conditions: meaningfulness, safety, and availability. Individuals’ perception of being rewarded for their labor in their role performances at work is defined as *psychological meaningfulness* (Kahn, 1990). The value individuals attach to

the purpose of work according to their ideals or standards constitutes the state of psychological meaningfulness (Hackman & Oldham, 1980; May et al., 2004). *Psychological safety* is defined as the individual's sense of dedication and self-disclosure without fear of negative effects on one's self-esteem, position, or career (Kahn, 1990, p. 708). Individuals can reveal their true selves when they feel an atmosphere of trust at work (May et al., 2004). *Psychological availability*, on the other hand, is expressed as the feeling of having the physical, emotional, and psychological resources required for individuals to devote themselves to role performance (Kahn, 1990).

Physical, emotional, and cognitive engagement are the three components of job engagement (Kahn, 1990; Rich et al., 2010). *Physical engagement* refers to the physical energy people spend to accomplish their duties. The individuals' determination and hard work while doing their jobs is possible with physical engagement (Kahn, 1990; Rich, 2006). In this context, Kahn's (1990) physical engagement dimension is consistent with Schaufeli et al.'s (2002) vigor dimension. *Emotional engagement* is related to how employees feel about the organization, its leaders, working circumstances, and their favorable or negative emotions about the organization and its leaders (Kahn, 1990). Emotional engagement shows parallelism with Schaufeli et al.'s (2002) dedication dimension. *Cognitive engagement*, on the other hand, is the state of focusing on one's work and giving full attention to it (Kahn, 1990). This dimension is also associated with the absorption dimension in Schaufeli et al.'s (2002) job engagement model (Schaufeli & Bakker, 2010).

Meaningful Work

Individuals seek to find meaning in their working life (Frankl, 1992). Meaningfulness, which expresses an inclusive state of existence, contributes significantly to individuals' sense of reaching their life goals. In this context, meaningfulness is essential for individuals' mental health, organizational health, and high performance (Chalofsky, 2003). It is striking that there is no complete agreement among scholars on the definition of meaningful work (Michaelson, 2021). Meaningful work means the work done has specific importance and positive meaning for individuals (Lysova et al., 2019; Rosso et al., 2010). Individuals find work meaningful when their expectations, values, beliefs, and behaviors are coordinated with the features and responsibilities of the job (Pratt & Ashforth, 2003). Scroggins (2008) defines meaningful work as work that allows people to adapt to their surroundings, experience success, and realize themselves. Work-life balance (May et al., 2004), meeting internal needs, and achieving goals all contribute to the sense of meaningful work (Ashmos & Duchon, 2000; Miller, 2008).

Meaningful work is about more than simply the significance of one's paid work; it is also about how one lives life. The harmonization of values, relationships, purpose, and activities pursued in life creates meaningful work (Chalofsky, 2003, p. 58). Individuals who have a sense of meaningful work are happier, more productive, and more responsible. Moreover, while productivity, creativity, and sense of achievement increase in organizations creating meaningful work, employee stress and absenteeism decrease (Chalofsky, 2010; Lips-Wiersma & Morris, 2018). Employees' feeling of

meaningful work is critical to ensuring organizational effectiveness (Christian et al., 2011).

In Hackman and Oldham's (1976) job characteristics model, experiencing meaningfulness at work is considered one of the critical psychological states. According to this model, meaningfulness at work is a key determinant in developing positive outcomes, such as job satisfaction, high-quality work performance, high internal work motivation, low absenteeism, and turnover. Since the 1990s, meaningful work has been at the forefront of organizational behavior, particularly in terms of human resource development (Bailey et al., 2019).

Chalofsky (2003, 2010) introduced the *integrated wholeness meaningful work model*, consisting of three components: *sense of self*, *the work itself*, and *sense of balance*. Miller (2008) added "*sense of contribution*" to this model. *The sense of self* is related to individuals' ability to devote themselves to their work with their whole being (mind, body, emotion, spirit), to harmonize their goals in life with their work, and to be aware of their potential. *The work itself* is associated with individuals' ability to master their performance, demonstrate creativity at work, experience continuous improvement and learning, and realize their purpose through work. It also includes a sense of autonomy, empowerment, and control over one's environment at work. *The sense of balance* is related to the ability of individuals to establish a balance between work and life in general (Chalofsky, 2003, 2010; Miller, 2008). *The sense of contribution* refers to the ability of individuals to use their skills, strengths, and abilities to serve others, make a difference, strive to make the world a better place, to feel part of something bigger. This model is based on Maslow's theory of motivation. The individual's effort to be an integrated whole and thus providing intrinsic motivation is a fundamental building block of the self-actualization process (Miller, 2008).

According to Göçen and Terzi (2019), meaningful work consists of six subdimensions (*meaning at work*, *search for meaning at work*, *work relationships*, *transcendence at work*, *humility at work*, and *meaning leadership at work*). *Meaning at work* is explained by the fact that the work done serves higher purposes for the individual, provides spiritual pleasure, and contributes to the individual's self-knowledge and personal development. *The search for meaning at work* refers to individuals' questioning the purpose of working life and their search for meaning at work. *The work relationships* express the positive communication climate, unity, trust, support, and solidarity that individuals establish with their colleagues in the workplace. *Transcendence at work* is defined as the love of work, inner peace, and spiritual pleasure of individuals in working life. The harmony between individual and organizational goals promotes a sense of transcendence at work. *Humility at work* means that individuals do not expect personal benefits, compliments, and rewards in the face of what they do by acting with the motivation of serving society. *Meaning leadership at work* is defined as the leader's power of influence and helping colleagues discover and realize their life goals and build meaning at work.

The Relation between Meaningful Work and Job Engagement

In recent decades, especially with the rise of positive psychology, meaningful work and job engagement issues have increased (Albrecht, 2013; Fairlie, 2011; Hoole & Bonnema, 2015). Meaningful work is closely related to positive psychology and job

engagement (Albrecht, 2013). Seligman (2002), the pioneer of positive psychology, defines “meaningful life” as the state of the highest happiness. According to Seligman, the source of a meaningful life is expressed as the search and experience of doing things people believe and value. Meaning in the workplace is a crucial aspect of a meaningful life (Cohen-Meitar et al., 2009). Meaningful work is a necessary prerequisite for experiencing job engagement (Kahn, 1990). Many studies conducted on organizations other than educational organizations emphasized that meaningful work leads to job engagement (Albrecht, 2013; Fairlie, 2011; May et al., 2004; Van Wingerden & Van der Stoep, 2018). Studies conducted on educational organizations (Fouché et al., 2017; Van Wingerden & Poell, 2019) indicated a positive and significant relationship between meaningful work and job engagement. Moreover, relevant studies suggest that meaningful work leads to job engagement.

Purpose of the Study

The purpose of the current study was to examine the relationship between meaningful work and job engagement based on teacher opinions. Accordingly, answers to the following research questions were sought:

1. Is there a relationship between meaningful work and job engagement according to teachers’ opinions?
2. Do gender, educational status, and seniority play a moderator role in the relationship between meaningful work and job engagement?

Method

Participants

The research population comprises 2374 teachers working in preschool, primary, secondary, and high school institutions in Kırıkkale province in the 2020-2021 academic years. Using a sample size table, we concluded that including at least 322-333 teachers was sufficient to ensure representativeness (Cohen et al., 2007, p. 104). We adopted stratified sampling method. Each school level (preschool, primary school, secondary school, high school) was considered a stratum to ensure the sample could best represent the population. In this context, we determined that 21 teachers from kindergarten, 81 teachers from primary school, 110 teachers from secondary school, and 119 teachers from high school could represent the population.

Data Collection Tools

Meaningful Work Scale (MWS)

We used MWS developed by Göçen and Terzi (2019) to examine the meaningful work level of teachers. The MWS consists of 21 items and six subscales. The subscales include *meaning at work* (5 items), *search for meaning at work* (3 items), *work relationships* (4 items), *transcendence at work* (3 items), *humility at work* (3 items), and *meaning leadership at work* (3 items). The MWS is a 5-point Likert-type scale ranging from “absolutely disagree” to “absolutely agree.” (Sample Items: “My work serves a great purpose” and “I feel my colleagues value me”). Factor loading values of the items for sub-dimensions of the scale are as follows: *meaning at work* (between .61 and .80), *search for meaning at work* (between .80 and .87), *work*

relations (between .71 and .82), *transcendence at work* (between .66 and .82), *humility at work* (between .75 and .78), and *meaning leadership at work* (between .61 and .84). Cronbach Alpha (α) reliability value of the MWS was .84 (Göçen & Terzi, 2019, p.1500). We re-examined the validity and reliability analyses of the MWS in this study. Confirmatory factor analysis (CFA) was applied in the Lisrel 8.80 program to test the validity and the six-dimensional structure was examined. The results of CFA [$\chi^2=384.93$; $df=183$; $\chi^2/df=2.10$; AGFI=.91; GFI=.92; NFI=.95; CFI=.97; RMSEA=.05] showed that the scale had construct validity. Within the scope of this research, we calculated the Cronbach Alpha value (α) of the MWS as .83. Cronbach Alpha values for sub-scales were found as .71 for meaning at work, .85 for search for meaning at work, .89 for work relationships, .71 for transcendence at work, .64 for humility at work, .81 for meaning leadership at work.

Job Engagement Scale (JES)

To examine the level of teachers' job engagement, we used the JES developed by Rich (2006) and adapted into Turkish as JES-TR by Öngöre (2013). Based on Kahn's (1990) study on engagement, the JES-TR consists of 18 items and three subscales (*physical engagement, emotional engagement, and cognitive engagement*). Each subscale has six items. The JES-TR is a 5-point Likert-type scale ranging from "strongly disagree" to "strongly agree." (Sample Items: "I exert a lot of energy on my job." and "I feel positive about my job."). The item load values of the JES-TR ranged from .52 to .70 in the physical engagement factor, between .62 and .73 in the emotional engagement factor, and between .70 and .79 in the cognitive engagement factor. Cronbach Alpha reliability value of the JES-TR was .95 (Öngöre, 2013). Within the current study, we retested the validity and reliability of the JES-TR. For the scale validity, CFA was performed in the Lisrel 8.80 program. JES-TR was found to have construct validity based on the results obtained with the five modifications made in the CFA process [$\chi^2=371.51$; $df=127$; $\chi^2/df=2.92$; AGFI=.89; GFI=.92; NFI=.98; CFI=.99; RMSEA=.06]. In this study, we calculated the Cronbach's Alpha value of the scale (α) as .95.

Procedures and Data Analysis

Research data were collected online from volunteer participants via Google forms. Due to Covid-19 pandemic circumstances throughout the study dates, we preferred the online data collection method. It took an average of ten minutes to complete the scales for participants. During the data collection, we distributed 500 scale forms to the participants to prevent potential data loss and reached 459 teachers.

After data collection, we transferred the data set to the SPSS 23 program and R Studio. As a result of the extreme value analysis, 452 (98%) scale forms were found suitable for the analysis. We examined correlation coefficients, variance inflation factors (VIF), and tolerance values to test whether there was a multicollinearity problem. We found that the correlation values between the independent variables were below .80. If the VIF value is less than ten and the tolerance values are equal to or greater than .10, it indicates no multicollinearity problem (Cohen et al., 2003, p. 423). In this study, we found the VIF value of the variables was between 1.01 and 1.67, and the tolerance values were between .598 and .983 acceptance range.

The correlation range of 0 to .30 was regarded as “low,” the range of .31 to .70 as “moderate,” and the range of .71 to 1.0 as “high” (Büyüköztürk, 2020, p. 32). We employed arithmetic mean, standard deviation, frequency, Pearson correlation coefficient, and regression analysis to analyze the data. Additionally, we ran moderation analyses to examine whether the variables of gender, educational status, and seniority played a moderator role between meaningful work and job engagement.

Ethical Procedures

Before the data collection, we obtained permission from the owners of the data collection tools via e-mail. We also got approval from the Social and Humanities Studies Ethics Committee of Kırıkkale University (July 18, 2020, session number: 07, decision no: 09) and legal permission from the Kırıkkale Provincial Directorate of National Education to apply the scales in relevant public schools. We informed participants that their personal information was kept confidential. Participation in the study was carried out voluntarily with a consent form.

Findings

Table 1

Descriptive Statistics for Variables

Variable	Mean	SD	Min.	Max.	Skew	Kurtosis
MWS	4.14	.44	2.14	5	-.51	.33
Meaning at Work	4.57	.45	2.80	5	-1.27	1.60
Search for Meaning	2.88	1.22	1	5	.08	-1.01
Work Relationships	4.13	.85	1	5	-.92	.41
Transcendence	4.40	.64	1.33	5	-1.18	1.55
Humility at Work	4.42	.65	1.67	5	-1.29	1.64
Meaning Leadership	4.19	.77	1	5	-.98	.87
JES-TR	4.57	.46	2.50	5	-1.31	1.43

Note. $N=452$. Gender: 1=Female (56%) and 2=Male (44%). Seniority: 1=1–5 years (8%), 2=6–10 years (19%), 3=11–15 years (19%), 4=16–20 years (17%), and 5=21 years and above (38%). Educational Status: 1=Associate Degree (4%), 2=Bachelor’s Degree (76%), and 3=Postgraduate Degree (20%).

We observed that the majority of the participants were women (56%), had seniority of 11 years and above (74%), and had bachelor’s degrees (76%). Skewness and kurtosis values were within $|2|$ the acceptable range, which did not pose a threat to further analyses (See Table 1). We found that teachers had high levels of meaningful work ($\bar{X}=4.14$, $Sd=.44$) and job engagement ($\bar{X}=4.57$, $Sd=.46$). The results of the correlation analysis regarding the MWS and the JES-TR are presented in Table 2.

Table 2
Correlation Analysis Results

Variable	1.	2.	3.	4.	5.	6.	7.	8.
1. MWS	1							
2. Meaning at Work	.67**	1						
3. Search for Meaning	.43**	-.03	1					
4. Work Relationships	.71**	.43**	.04	1				
5. Transcendence	.66**	.56**	.04	.40**	1			
6. Humility at Work	.43**	.24**	-.00	.10*	.22**	1		
7. Meaning Leadership	.73**	.46**	.01	.47**	.44**	.34**	1	
8. JES-TR	.58**	.61**	-.00	.37**	.56**	.32**	.46**	1

$N=452$; ** $p<.01$; * $p<.05$

The results of correlation analysis indicated a positive, moderate, and significant relationship between meaningful work and job engagement ($r=.58$, $p<.01$). Except for *the search for meaning at work* dimension, positive and significant relationships were found in the meaningful work sub-dimensions and job engagement. The results of multiple regression analysis are presented in Table 3.

Table 3
Multiple Regression Results

Variable	Model 1: MW				Model 2: MW + Demographics			
	Est. (SE)	t	β	η^2	Est. (SE)	t	β	η^2
Intercept	1.28(.18)***	7.05	0	0	1.41(.21)***	6.72	0	0
Meaning at Work	.36(.45)***	7.93	.35	.37	.35(.05)***	7.75	.34	.32
Search for Meaning	-.01(.01)	-.57	-.02	<.01	-.01(.01)	-.59	-.02	0
Work Relationships	.02(.02)	1.09	.05	.01	.01(.02)	.51	.02	0
Transcendence	.19(.03)***	6.16	.27	.06	.19(.03)***	6.14	.27	.06
Humility at Work	.09(.03)***	3.56	.13	.02	.09(.03)***	3.44	.13	.02
Meaning Leadership	.07(.03)**	2.64	.11	0	.07(.03)**	2.65	.11	0
Gender					-.04(.03)	-1.16	-.04	0
Seniority					.03(.01)*	2.15	.08	.06
Educational Status					-.03(.04)	-.82	-.03	0
	Adj. $R^2=.467$				Adj. $R^2=.472$			
	$F(6,445)= 67.08$ ***				$F(9,442)= 45.85$ ***			

Note. * $p<.05$; ** $p<.01$; *** $p<.001$. SE=standard error (in parenthesis). η^2 = eta-squared that represents the proportion of variance in the dependent variable explained by the independent variables. The dependent variable is job engagement.

Firstly, we employed regression analysis with the sub-dimensions of MW in Model 1 using R statistical computing environment (RStudio Team, 2022). Meaningful work explained 47% of the variance in job engagement (see Table 3). We found that *meaning at work* ($\beta=.35, p<.001$), *transcendence* ($\beta=.27, p<.001$), *humility at work* ($\beta=.13, p<.001$), and *meaning leadership* ($\beta=.11, p<.01$) were significant and positive predictors of job engagement, respectively. We found that *search for meaning at work* and *work relations* were not significant predictors of teachers' job engagement. When demographic factors (gender, seniority and educational status) were added in Model 2, the model still explained 47% of the variance in teachers' job engagement. The effects of MW subscales on JE were robust to model specifications when covariates were added. *Meaning at work* ($\beta=.34, p<.001$), *transcendence* ($\beta=.27, p<.001$), *humility at work* ($\beta=.13, p<.001$), and *meaning leadership* ($\beta=.11, p<.01$) were still significant and positive predictors of job engagement, respectively. Model 2 revealed that seniority was significant and positive predictor of job engagement ($\beta=.08, p<.05$). We ran moderation analyses to test whether gender, educational status, and seniority play a moderator role in the relationship between meaningful work and job engagement. The results of moderation analyses are presented in Table 4.

Moderation analyses indicated that the effects of MW subscales on JES-TR did not change mostly across moderator levels. Gender and educational status did not moderate the relationship between meaningful work and job engagement (see Table 4). Seniority moderated the relationship between work relationships and job engagement ($\beta=.12, p<.05$). This finding means that work relationships in conjunction with seniority results in job engagement.

Table 4

Moderation Analyses Results

Variable	Moderator: Gender				Moderator: Educational Status				Moderator: Seniority			
	Est. (SE)	<i>t</i>	β	η^2	Est. (SE)	<i>t</i>	β	η^2	Est. (SE)	<i>t</i>	β	η^2
Intercept	4.58(.02)***	281.57	0	0	4.58(.02)***	280.96	0	0	4.57(.02)***	272.87	0	0
Meaning at Work	.16(.02)***	7.46	.34	.37	.16(.02)***	7.48	.34	.37	.16(.02)***	7.29	.33	.37
Search for Meaning	-.01(.02)	-.62	-.02	0	-.01(.02)	-.68	-.02	0	-.01(.02)	-.68	-.02	0
Work Relationships	.00(.02)	.16	.01	.01	.01(.02)	.67	.03	.01	.02(.02)	.99	.04	.01
Transcendence	.13(.02)***	6.17	.27	.06	.12(.02)***	5.85	.26	.06	.12(.02)***	5.58	.25	.06
Humility at Work	.06(.02)***	3.35	.13	.02	.06(.02)***	3.60	.14	.02	.06(.02)**	3.10	.12	.02
Meaning Leadership	.06(.02)**	2.92	.13	0	.06(.02)*	2.60	.11	0	.06(.02)**	2.69	.12	0
Gender	-.02(.02)	-1.17	-.04	0	-.02(.02)	-1.26	-.05	0	-.02(.02)	-1.25	-.05	0
Seniority	.04(.02)*	2.18	.08	0	.04(.02)*	2.05	.07	0	.04(.02)*	2.20	.08	0
Educational Status	-.02(.02)	-1.08	-.04	0	-.01(.02)	-.60	-.02	0	-.01(.02)	-.63	-.02	0
Moderator x Meaning at Work	.01(.02)	.57	.03	0	.01(.02)	.61	.03	0	-.03(.02)	-1.52	-.07	0
Moderator x Search for Meaning	.02(.02)	1.09	.04	0	-.00(.02)	-.24	-.01	0	.00(.02)	.08	0	0
Moderator x Work Relationships	-.03(.02)	-1.65	-.07	0	-.01(.02)	-.54	-.02	0	.05(.02)*	2.58	.12	0
Moderator x Transcendence	.03(.02)	1.32	.01	0	.02(.02)	.91	.04	0	-.04(.02)	-1.74	-.08	0
Moderator x Humility at Work	.00(.02)	.15	.01	0	.02(.02)	.84	.03	0	-.00(.02)	-.03	0	0
Moderator x Meaning Leadership	.02(.02)	.75	.03	0	-.03(.02)	-1.53	-.12	0	-.00(.02)	-.18	-.01	0
	Adj. $R^2=.47$				Adj. $R^2=.47$				Adj. $R^2=.48$			

 $F(15,436)=28.07^{***}$
 $F(15,436)=27.69^{***}$
 $F(15,436)=28.72^{***}$

Note. * $p < .05$; ** $p < .01$; *** $p < .001$. SE=standard error (in parenthesis). η^2 =eta-squared represents the proportion of variance in the outcome explained by the corresponding predictor variable. The dependent variable is job engagement.

Discussion and Conclusion

We examined the relationship between meaningful work and job engagement in this study. The findings revealed the meaningful work level of teachers was high. This finding is in line with the findings of studies on teachers (e.g., Akar, 2020; Fouché et al., 2017; Toptaş, 2018). Willey (2016) reported that teachers working in international schools found their work meaningful in a qualitative study. Månsson and Persson (2005) reported that teachers found their work meaningful despite major challenges in the workplace, particularly at the psychosocial level. Furthermore, in another study, it was concluded academicians found their work highly meaningful (Balci et al., 2019). The critical value of the teaching profession in raising qualified human resources can explain why teachers have such a high level of meaningful work. Kahraman and Çelik (2020) reported that teachers' perceptions regarding the prestige of the teaching profession were positive. The spiritual (intrinsic) satisfaction felt while performing the profession and the academic success of the pupils in return for their efforts are two aspects that motivate teachers (Karabağ-Köse et al., 2018). The teaching profession contributes to social progress in terms of raising future generations. In this respect, teachers' high level of meaningful work may be related to the fact that the teaching profession requires dedication and calling (Wrzesniewski et al., 1997).

Teachers often lose motivation due to excessive workload, stress, burnout, low wages, and society's lack of appreciation for the teaching profession (European Commission/EACEA/Eurydice, 2015; Karabağ-Köse et al., 2018). However, being a teacher means touching the lives of students, being versatile, being open to improvement, presenting fresh viewpoints, guiding, and struggling with challenges (Koşar, 2019). Teachers experience meaningful work through integrating personal and professional values, making a difference in students' lives, finding joy from creativity, developing via work, building meaningful connections, and feeling empowered by professional autonomy (Willey, 2016). Working closely with students, monitoring their progress, shaping the future, and thus assuming meaningful social responsibility can contribute to teachers' sense of meaningful work (Demirkasimoğlu, 2015). Moreover, teachers' contribution to students' learning and success by dedicating themselves to their work can provide them with intrinsic motivation and meaningful work experience.

The present study found that teachers have a high level of job engagement. Some studies in the literature concluded that teachers' job engagement emerge at high level (e.g., Basikin, 2007; Çarıkcı, 2020; Çelik, 2019; Ceviz, 2017; Fouché et al., 2017; Gün, 2017; Gürler, 2018; İnanır, 2020; Kavgacı, 2014; Özkeskin, 2019) and moderate level (e.g., Akdeniz & Ottekin Demirbolat, 2019; Coleman, 2016). In the present study, high intrinsic work motivation, positive psychological capital, work dedication, and perseverance in the face of difficulties may be effective in the high level of teachers' job engagement (Coleman, 2016; Eser, 2018; Price, 2017; Tösten et al., 2019). Individual psychological characteristics such as self-efficacy, optimism, resilience, and high levels of hope are effective in teachers' job engagement (Coleman, 2016).

This study showed a positive, moderate, and significant relationship between meaningful work and job engagement. This finding is consistent with the findings of studies on teachers (e.g., Fouché et al., 2017; Van Wingerden & Poell, 2019). Perceiving work as meaningful can increase teachers' sense of responsibility, well-being, and happiness. This context may play a role in teachers' putting more effort into their work and ensuring job engagement (Fouché et al., 2017; Fourie & Deacon, 2015; Lavy & Bocker, 2018). As a result of the role performance of the teaching profession, teachers' feeling of being rewarded for their efforts shows a state of meaningfulness, one of the psychological states stated by Kahn (1990). Except for *the search for meaning at work* dimension, positive and significant relationships were found in the meaningful work sub-dimensions and job engagement. To be human is to be in search of meaning throughout life. Teachers' opinions on seeking meaning at work may have changed due to the pandemic.

As a result of the research, we found that meaningful work was a significant predictor of teachers' job engagement. 47% of the variability in teachers' job engagement scores was explained by the six dimensions of the meaningful work scale. This finding is supported by the findings of studies conducted on teachers (e.g., Fouché et al., 2017; Van Wingerden & Poell, 2019). The variables explaining teachers' job engagement are listed in order of importance as meaning at work, transcendence at work, humility at work, meaning leadership at work, work relations, and search for meaning at work. The results showed that the dimensions of meaning at work, transcendence at work, humility at work, and meaning leadership were significant predictors of job engagement. Teachers who feel they are doing meaningful work while performing the teaching profession are aware that they are working for a purpose. This, in turn, can enable teachers to adapt their selves to their work roles and to feel engaged in their professions (Kahn & Heaphy, 2014).

In the present study, we found the search for meaning at work and work relations dimensions were not significant predictors of teachers' job engagement. This finding contradicts the findings of the studies in the literature that work relations ensure job engagement (e.g., Fouché et al., 2017; Kahn & Heaphy, 2014). Teachers' working conditions may change over time in unpredictable ways, such as during the Covid-19 pandemic (Harris & Jones, 2020). In such an environment of undeniable crisis and chaos, the adaptation process of teachers to the changes may take time. Hargreaves and Fullan (2020) reported that teacher cooperation, teacher-student relations, and teachers' work relations have weakened during the pandemic process. In another study by Ballová-Mikušková and Verešová (2020), it was found that teachers' negative emotions increased while their positive emotions decreased during the pandemic period. In the pandemic conditions covering the period in which this study was conducted, distance education was conducted in Turkey, as in many other countries of the world. In this period, teachers mostly established work relationships in the online environment. Therefore, the change in teachers' opinions of seeking meaning at work and work relations during the pandemic period may not have contributed positively to their level of job engagement.

The present study found that seniority was a significant and positive predictor of job engagement, while gender and educational status did not predict job engagement. The moderation analyses showed that gender and educational status did not moderate

the relationship between meaningful work and job engagement. These findings support studies that have found no significant difference in teachers' level of job engagement in terms of gender (e.g., Basikin, 2007; Çelik, 2019; Ceviz, 2017; Eser, 2018; Gün, 2017; Gürler, 2018; İnanır, 2020; Kavgacı, 2014; Özkeskin, 2019) and educational status (e.g., Akdeniz, 2018; Ceviz, 2007; Gün, 2017; İnanır, 2020; Özkeskin, 2019). However, some studies found male teachers had higher levels of job engagement than females (e.g., Akdeniz, 2018; Çağrı-San & Tok, 2017). Furthermore, some studies have concluded that teachers' job engagement levels decrease as their level of education increases (e.g., Çelik, 2019; Gürler, 2018; Jackson, 2004; Kavgacı, 2014). We found that seniority had a moderator effect on the relationship between work relationships and job engagement. Contrary to this result, some studies concluded that seniority did not make a significant difference in teachers' job engagement (e.g., Akdeniz, 2018; Ceviz, 2007; Çağrı-San & Tok, 2017; Gürler, 2018; İnanır, 2020).

The effects of meaningful work sub-dimensions on job engagement were robust to model specifications when covariates were added, and their effect did not change mostly across moderator levels. This indicates that interventions such as professional development that aim to improve teachers' job engagement should focus on 'meaningful work' in their program. Furthermore, these professional development programs should be structured to promote "work relationships" based on seniority status rather than gender or education level.

Experiencing teaching as meaningful work and ensuring job engagement can yield positive outcomes in terms of teacher motivation. In this context, important responsibilities fall on policymakers and education administrators to encourage teachers to feel meaningful work in their profession. Practices and policies such as supporting teacher autonomy, creating an environment of trust and positive communication, and making teachers feel valued can be implemented (Fouché et al., 2017). Thus, it can be ensured teachers transfer their energies to work and feel engaged in their jobs. Additionally, researchers can examine the relationship between meaningful work and job engagement in larger samples, including public and private schools. Studies on the relationship between the variables of meaningful work and job engagement with different variables can be conducted in educational organizations.

Statement of Responsibility

The study was conducted and reported with the equal collaboration of the researchers.

Author Bios

Erdem Karataş is research assistant in Educational Administration at the faculty of Education of Kırıkkale University (Turkey). His current research interests are leadership in education and organizational behavior in educational organizations.

Murat Özdemir is professor in Educational Administration at the Faculty of Education of Hacettepe University (Turkey). His current research interests are leadership in education and philosophical, historical and scientific foundations of educational administration.

References

- Akar, F. (2020). Examining the meaningful work level of generation X and generation Y teachers. *Elementary Education Online*, 19(3), 1225-1241.
- Akdeniz, A. (2018). *Eğitim örgütlerinde öğretmenlerin örgütsel adalet alguları ile işle bütünleşme alguları arasındaki ilişki ve bazı değişkenlere göre incelenmesi* [Unpublished Master's Thesis]. Gazi University.
- Akdeniz, A., & Ottekin Demirbolat, A. (2019). Ortaokullarda öğretmenlerin örgütsel adalet alguları ile işle bütünleşme alguları arasındaki ilişki. *Journal of Turkish Educational Sciences*, 17(2), 418-442.
- Albrecht, S. L. (2013). Work engagement and the positive power of meaningful work. In A. B. Bakker (Ed.), *Advances in positive organizational psychology* (pp. 237-260). Emerald Group Publishing. [https://doi.org/10.1108/S2046-410X\(2013\)0000001013](https://doi.org/10.1108/S2046-410X(2013)0000001013)
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry*, 9(2), 134-145. <https://doi.org/10.1177/105649260092008>
- Bailey, C., Yeoman, R., Madden, A., Thompson, M., & Kerridge, G. (2019). A review of the empirical literature on meaningful work: Progress and research agenda. *Human Resource Development Review*, 18(1), 83-113. <https://doi.org/10.1177/1534484318804653>
- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, 66, 26-44. <https://doi.org/10.1016/j.jvb.2003.11.001>
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189-206. <https://doi.org/10.1348/096317909X402596>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284. <https://doi.org/10.1037/0022-0663.99.2.274>
- Balcı, A., Akar, F., & Öztürk, İ. (2019). Akademisyenlerin işlerini anlamlı bulma düzeyinin çeşitli değişkenlere göre incelenmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 25(2), 241-284. <https://doi.org/10.14527/kuey.2019.007>
- Ballová-Mikušková, E., & Verešová, M. (2020). Distance education during Covid-19: The perspective of Slovak teachers. *Problems of Education in the 21st Century*, 78(6), 884-906. <https://doi.org/10.33225/pec/20.78.884>
- Basikin, B. (2007). *Vigor, dedication, and absorption: Work engagement among secondary school English teachers in Indonesia*. AARE Annual Conference, full conference paper (pp. 25-29). <https://www.aare.edu.au/data/publications/2007/bas07349.pdf>

- Bird, J. J., Wang, C., Watson, J., & Murray, L. (2012). Teacher and principal perceptions of authentic leadership: Implications for trust, engagement, and intention to return. *Journal of School Leadership, 22*(3), 425-461. <https://doi.org/10.1177/105268461202200302>
- Blatný, M., Květon, P., Jelínek, M., Šolcová, I., Zábrowská, K., Mudrák, J., & Machovcová, K. (2018). The influence of personality traits on life satisfaction through work engagement and job satisfaction among academic faculty members. *Studia Psychologica, 60*(4), 274-286. <https://doi.org/10.21909/sp.2018.04.767>
- Breevaart, K., & Bakker, A. B. (2018). Daily job demands and employee work engagement: The role of daily transformational leadership behavior. *Journal of Occupational Health Psychology, 23*(3), 338-349. <https://doi.org/10.1037/ocp0000082>
- Burić, I., & Macuka, I. (2018). Self-efficacy, emotions and work engagement among teachers: A two-wave cross-lagged analysis. *Journal of Happiness Studies, 19*(7), 1917-1933. <https://doi.org/10.1007/s10902-017-9903-9>
- Büyüköztürk, Ş. (2020). *Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum* (28. baskı). Pegem Akademi Yayıncılık.
- Çağrı-San, B., & Tok, T. N. (2017). The relationship between teachers' work engagement and organizational commitment. *Pamukkale University Journal of Social Sciences Institute, 26*, 355-370.
- Çarıkcı, E. (2020). Lise öğretmenlerinin duygusal emek davranışları ile işle bütünleşmeleri arasındaki ilişki [The relationship between high school teachers' emotional labor behaviors and work engagements]. *Al-Farabi International Journal of Social Sciences, 5*(2), 37-50.
- Çelik, S. N. (2019). *Öğretmenlerin işle bütünleşme düzeyleri ile değişime dirençleri arasındaki ilişkinin incelenmesi* [Unpublished master's thesis]. Kastamonu University.
- Ceviz, T. (2017). *Ortaokul öğretmenlerinin işle bütünleşme ile örgütsel sessizlik davranışları arasındaki ilişkinin incelenmesi* [The relationship between work engagement and organizational silence behaviors of the secondary school teachers] [Unpublished master's thesis]. Gazi University.
- Chalofsky, N. (2003). An emerging construct for meaningful work. *Human Resources Development International, 6*(1), 69-83. <https://doi.org/10.1080/1367886022000016785>
- Chalofsky, N. (2010). *Meaningful workplaces: Reframing how and where we work*. Jossey-Bass.
- Chaolertseree, S., & Taephant, N. (2020). Outcomes of meaningful work with a focus on Asia: A systematic review. *The Journal of Behavioral Science, 15*(3), 101-116.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*(1), 89-136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Erlbaum.

- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th edition). Routledge.
- Cohen-Meitar, R., Carmeli, A., & Waldman, D. A. (2009). Linking meaningfulness in the workplace to employee creativity: The intervening role of organizational identification and positive psychological experiences. *Creativity Research Journal*, 21(4), 361-375. <https://doi.org/10.1080/10400410902969910>
- Coleman, S. (2016). *Teachers as leaders: The role of psychological capital on the work engagement of elementary school teachers* [Unpublished doctorate dissertation]. The Chicago School of Professional Psychology.
- Demirkasımoğlu, N. (2015). The meaning of work in teachers' lives: A qualitative study. *The Anthropologist*, 22(2), 412-423. <https://doi.org/10.1080/09720073.2015.11891894>
- Eser, İ. (2018). *Öğretmenlerin etik liderlik algısının işle bütünleşme ile olan ilişkisinde pozitif psikolojik sermayenin aracılık etkisi* [Unpublished doctorate dissertation]. Gaziantep University.
- European Commission/EACEA/Eurydice. (2015). *The teaching profession in Europe: Practices, perceptions, and policies*. Eurydice report. Publications Office of the European Union.
- Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Advances in Developing Human Resources*, 13(4), 508-525. <https://doi.org/10.1177/1523422311431679>
- Ferguson, A., & Carstairs, J. (2005). *Employee engagement: Does it exist, and if so, how does it relate to performance, other constructs and individual differences?* Paper presented at the Annual Industrial/ Organizational Psychology Conference, Australian Psychological Society. <https://drferguson.com.au/wp-content/uploads/2019/07/Employee-Engagement-4.pdf>
- Fouché, E., Rothmann, S. S., & Van der Vyver, C. (2017). Antecedents and outcomes of meaningful work among school teachers. *SA Journal of Industrial Psychology*, 43(1), 1-10. <https://doi.org/10.4102/sajip.v43i0.1398>
- Fourie, M., & Deacon, E. (2015). Meaning in work of secondary school teachers: A qualitative study. *South African Journal of Education*, 35(3), 1-8. <https://doi.org/10.15700/saje.v35n3a1047>
- Frankl, V. (1992). *Man's search for meaning: An introduction to logotherapy*. Beacon Publishing.
- Göçen, A., & Terzi, R. (2019). Eğitim örgütleri için anlamlı iş ölçeği. *Gazi University Journal of Gazi Educational Faculty*, 39(3), 1487-1512.
- Goffman, E. (1972). *Encounters: Two studies in the sociology of interaction*. Bobbs-Merrill Co.
- Gordon, G. (2006). *Building engaged schools: Getting the most out of America's classrooms*. Gallup Press.
- Granziera, H., & Perera, H. N. (2019). Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view. *Contemporary Educational Psychology*, 58, 75-84. <https://doi.org/10.1016/j.cedpsych.2019.02.003>

- Guglielmi, R. S., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: A methodological and theoretical analysis. *Review of Educational Research*, 68, 61-99. <https://doi.org/10.3102/00346543068001061>
- Gün, F. (2017). Öğretmenlerin eğitime inanma ve işle bütünleşme düzeyleri arasındaki ilişkinin incelenmesi. *Journal of Theoretical Educational Science*, 10(4), 408-431.
- Gürler, M. (2018). *Öğretmenlerin lider-üye etkileşimi ile işle bütünleşme ilişkisinde çalışan sosliliğinin aracılık etkisinin incelenmesi* [Unpublished doctorate dissertation]. Anadolu University.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7)
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Addison-Wesley.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513. <https://doi.org/10.1016/j.jsp.2005.11.001>
- Han, J., Yin, H., & Wang, W. (2016). The effect of tertiary teachers' goal orientations for teaching on their commitment: The mediating role of teacher engagement. *Educational Psychology*, 36(3), 526-547. <https://doi.org/10.1080/01443410.2015.1044943>
- Hargreaves, A., & Fullan, M. (2020). Professional capital after the pandemic: revisiting and revising classic understandings of teachers' work. *Journal of Professional Capital and Community*, 5(3/4), 327-336. <https://doi.org/10.1108/JPC-06-2020-0039>
- Harris, A., & Jones, M. (2020). COVID 19-school leadership in disruptive times. *School Leadership & Management*, 40(4), 243-247. <https://doi.org/10.1080/13632434.2020.1811479>
- Hoigaard, R., Giske, R., & Sundsli, K. (2012). Newly qualified teachers' work engagement and teacher efficacy influences on job satisfaction, burnout, and the intention to quit. *European Journal of Teacher Education*, 35(3), 347-357. <https://doi.org/10.1080/02619768.2011.633993>
- Hoole, C., & Bonnema, J. (2015). Work engagement and meaningful work across generational cohorts. *SA Journal of Human Resource Management*, 13(1), 1-11. <https://doi.org/10.4102/sajhrm.v13i1.681>
- Hu, J., & Hirsh, J. (2017). The benefits of meaningful work: A meta-analysis. *Academy of Management*, 1. <https://doi.org/10.5465/AMBPP.2017.13866abstract>
- İlğan, A., & Ceviz, H. (2019). The relationship between the perception of the society related to teaching profession and teachers' professional motivation according to teachers' views. *Educational Administration: Theory and Practice*, 25(2), 285-338. <https://doi.org/10.14527/kuey.2019.008>
- İnanır, B. (2020). *Öğretmenlerin işle bütünleşme düzeyleri ile okul iklimi ve öğretmen liderliği arasındaki ilişkilerin incelenmesi* [Unpublished master's thesis]. Kastamonu University.
- Jackson, L. T. B. (2004). *Burnout and engagement of teachers in the North West Province* [Unpublished doctorate dissertation]. North-West University.

- Janik, M., & Rothmann, S. (2015). Meaningful work and secondary school teachers' intention to leave. *South African Journal of Education*, 35(2), 1008-1008. <https://doi.org/10.15700/saje.v35n2a1008>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.5465/256287>
- Kahn, W. A., & Heaphy, E. D. (2014). Relational context of personal engagement at work. In C. Truss, R. Delbridge, E. Soane, K. Alfes, & A. Shantz (Eds.), *Employee engagement in theory and practice* (pp. 163-179). Routledge.
- Kahraman, Ü., & Çelik, O. T. (2020). The status of teaching profession from teachers' points of view. *Educational Administration: Theory and Practice*, 26(3), 519-564 <https://doi.org/10.14527/kuey.2020.012>
- Kang, S., & Yoo, H. (2019). Music teachers' psychological needs and work engagement as predictors of their well-being. *Bulletin of the Council for Research in Music Education*, 221, 58-71. <https://doi.org/10.5406/bulcouresmusedu.221.0058>
- Karabağ-Köse, E., Taş, A., Küçükçene, M., & Karataş, E. (2018). Öğretmen motivasyonunu etkileyen faktörlere ilişkin yönetici ve öğretmen görüşleri üzerine karşılaştırmalı bir inceleme. *Mehmet Akif Ersoy University Journal of Education Faculty*, 48, 255-277.
- Kavgacı, H. (2014). *İlköğretim kurumu öğretmenlerinin işle bütünleşme düzeylerinin bireysel ve örgütsel değişkenlerle ilişkisi* [Unpublished doctorate Dissertation]. Gazi University.
- Khan, S. (2016). Influence of organizational culture on teacher's work engagement: An empirical study. *IUP Journal of Organizational Behavior*, 15(4), 27-46.
- Klassen, R. M., Aldhafri, S., Mansfield, C. F., Purwanto, E., Siu, A. F., Wong, M. W., & Woods-McConney, A. (2012). Teachers' engagement at work: An international validation study. *The Journal of Experimental Education*, 80, 317-337. <https://doi.org/10.1080/00220973.2012.678409>
- Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Engagement and emotional exhaustion in teachers: Does the school context make a difference? *Applied Psychology*, 57, 127-151. <https://doi.org/10.1111/j.1464-0597.2008.00358.x>
- Koçak, S., & Nartgün, Ş. S. (2020). Öğretmenlerin işe angaje olmaları ile okul etkililiği arasındaki ilişki. *Journal of Human Sciences*, 17(3), 792-811. <https://doi.org/10.14687/jhs.v17i3.5959>
- Koşar, D. (2019). Öğretmenlerin mesleki deneyimlerinin incelenmesi: Öğretmen olmanın anlamına ilişkin fenomenolojik bir çalışma. *Journal of History Culture and Art Research*, 8(2), 333-346. <https://doi.org/10.7596/taksad.v8i2.2122>
- Köse, A., & Uzun, M. (2018). The relationship between work engagement and perceived organizational justice. *Educational Administration: Theory and Practice*, 24(3), 483-528. <https://doi.org/10.14527/kuey.2018.012>
- Kun, A., & Gadancz, P. (2019). Workplace happiness, well-being and their relationship with psychological capital: A study of Hungarian teachers. *Current*

- Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*. Advance online publication. <https://doi.org/10.1007/s12144-019-00550-0>
- Lavy, S., & Bocker, S. (2018). A path to teacher happiness? A sense of meaning affects teacher-student relationships, which affect job satisfaction. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 19(5), 1485-1503. <https://doi.org/10.1007/s10902-017-9883-9>
- Leonetti, J. (2019). *Teacher engagement in central European international schools*. [Unpublished doctorate dissertation]. Concordia University.
- Lips-Wiersma, M., & Morris, L. (2018). *The map of meaningful work (2nd edition): A practical guide to sustaining our humanity*. Routledge.
- Louis, K. S., & Smith, B. (1991). Restructuring, teacher engagement and school culture: Perspectives on school reform and the improvement of teacher's work. *School Effectiveness and School Improvement*, 2(1), 34-52. <https://doi.org/10.1080/0924345910020104>
- Lysova, E. I., Allan, B. A., Dik, B. J., Duffy, R. D., & Steger, M. F. (2019). Fostering meaningful work in organizations: A multi-level review and integration. *Journal of Vocational Behavior*, 110, 374-389. <https://doi.org/10.1016/j.jvb.2018.07.004>
- Månsson, E., & Persson, A. (2005). Meaningful work in a demanding work environment - teachers at school. In R. Å. Gustafsson, & I. Lundberg (Eds.), *Worklife and health in Sweden 2004* (pp. 319-340). Arbetslivsinstitutet/Arbetsmiljöverket.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37. <https://doi.org/10.1348/096317904322915892>
- Michaelson, C. (2021). A normative meaning of meaningful work. *Journal of Business Ethics*, 170, 413-428. <https://doi.org/10.1007/s10551-019-04389-0>
- Miller, C. S. (2008). *Meaningful work over the life course* [Unpublished doctorate dissertation]. Fielding Graduate University.
- Minkinen, J., Auvinen, E., & Mauno, S. (2020). Meaningful work protects teachers' self-rated health under stressors. *Journal of Positive School Psychology*, 4(2), 140-152. <https://doi.org/10.47602/jpsp.v4i2.209>
- OECD (2005). *Attracting, developing and retaining effective teachers—Final report: Teachers matter*. OECD Publications. Retrieved February 8, 2021, from <https://www.oecd.org/education/school/34990905.pdf>
- Öncel, L. (2007). *Öğretmenlerin işleriyle bütünleşme düzeylerinin performansları ve iş yerlerinden ayrılma niyetleriyle ilişkisi* [Unpublished master's thesis]. İstanbul University.
- Öngöre, Ö. (2013). İşle bütünleşme ölçeği Türkçe formunun güvenilirlik ve geçerlilik çalışması. *Kastamonu University Journal of Faculty of Economics and Administrative Sciences*, 2(2), 50-60.
- Özkeskin, M. (2019). *Öğretmenlerin işle bütünleşme düzeyleri ile örgütsel bağlılıkları arasındaki ilişkinin incelenmesi* [Unpublished master's thesis]. Kastamonu University.

- Parker, P. D., & Martin, A. J. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related well-being and engagement. *Teaching and Teacher Education*, 25, 68-75. <https://doi.org/10.1016/j.tate.2008.06.009>
- Patrick, B. C., Hisley, J., & Kempler, T. (2000). "What's everybody so excited about?": The effects of teacher enthusiasm on student intrinsic motivation and vitality. *Journal of Experimental Education*, 68, 217-236.
- Pratt, M. G., & Ashforth, B. E. (2003). Fostering meaningfulness in working and at work. Cameron, K. S., Dutton, J. E., & Quinn, R. E. (Ed.) *Positive organizational scholarship: Foundations of a new discipline* (pp. 309-327). Berrett-Koehler Publishers.
- Price, S. (2017). *Examining the role of psychological capital as a mediator between perceived authentic leadership, work engagement and workplace commitment among school teachers* [Unpublished doctorate dissertation]. University of Cape Town.
- Rich, B. L. (2006). *Job engagement: Construct validation and relationships with job satisfaction, job involvement, and intrinsic motivation* [Unpublished doctorate dissertation]. University of Florida.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617-635. <https://doi.org/10.5465/AMJ.2010.51468988>
- Rosso, B. D., Dekas, K. H., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, 91-127. <https://doi.org/10.1016/j.riob.2010.09.001>
- Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology*, 99, 761-774. <https://doi.org/10.1037/0022-0663.99.4.761>
- RStudio Team (2022). *RStudio: Integrated development environment for R*. RStudio, PBC, Boston, MA URL <http://www.rstudio.com/>
- Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In A. M. Huberman (Ed.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 38-58). Cambridge University Press.
- Runhaar, P., Konermann, J., & Sanders, K. (2013). Teachers' organizational citizenship behaviour: Considering the roles of their work engagement, autonomy and leader-member exchange. *Teaching and Teacher Education*, 30(2013), 99-108. <https://doi.org/10.1016/j.tate.2012.10.008>
- Rusu, P. P., & Colomeischi, A. A. (2020). Positivity ratio and well-being among teachers. The mediating role of work engagement. *Frontiers in Psychology*, 11, 1608. <https://doi.org/10.3389/fpsyg.2020.01608>
- Salanova, M., Bakker, A. B., & Llorens, S. (2006). Flow at work: Evidence for an upward spiral of personal and organizational resources. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 7(1), 1-22.

- Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). "Yes, I can, I feel good, and I just do it!" On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology: An International Review*, 60(2), 255-285. <https://doi.org/10.1111/j.1464-0597.2010.00435.x>
- Schaufeli, W. (2012). Work engagement: What do we know and where do we go? *Romanian Journal of Applied Psychology*, 14(1), 3-10.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716. <https://doi.org/10.1177/0013164405282471>
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10-24). Psychology Press.
- Schaufeli, W. B., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology*, 20(1), 39-46. <https://doi.org/10.1080/1359432X.2010.515981>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 3(1), 71-92. <https://doi.org/10.1023/A:1015630930326>
- Scroggins, W. A. (2008). Antecedents and outcomes of experienced meaningful work: A person-job fit perspective. *The Journal of Business Inquiry*, 7(1), 68-78.
- Selamat, N., Nordin, N., & Fook, C. Y. (2017). The power of meaningful work: Extra mile teachers. *Journal of the International Society for Teacher Education*, 21(2), 7-14.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. Free Press.
- Sethi, J., & Scales, P. C. (2020). Developmental relationships and school success: How teachers, parents, and friends affect educational outcomes and what actions students say matter most. *Contemporary Educational Psychology*, 63, 101904. <https://doi.org/10.1016/j.cedpsych.2020.101904>
- Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology*, 20(3), 285-304. <https://doi.org/10.1080/13594320903513916>
- Skaalvik, E. M., & Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological Reports*, 114(1), 68-77. <https://doi.org/10.2466/14.02.PR0.114k14w0>
- Somech, A., & Ron, I. (2007). Promoting organizational citizenship behavior in schools: The impact of individual and organizational characteristics. *Educational Administration Quarterly*, 43(1), 38-66. <https://doi.org/10.1177/0013161X06291254>

- Song, J. H., Kim, W., Chai, D. S., & Bae, S. H. (2014). The impact of an innovative school climate on teachers' knowledge creation activities in Korean schools: The mediating role of teachers' knowledge sharing and work engagement. *KEDI Journal of Educational Policy*, 11(2), 179-203.
- Steger, M. F., & Dik, B. J. (2010). Work as meaning: Individual and organizational benefits of engaging in meaningful work. In P. A. Linley, S. Harrington, & N. Garcea (Eds.), *Oxford handbook of positive psychology and work* (pp. 131-142). Oxford University Press.
- Toptaş, B. (2018). Öğretmenlerin işlerini anlamlı bulma düzeyleri ve işlerini anlamlı bulmalarını etkileyen etmenler. *Abant İzzet Baysal University Journal of Faculty of Education*, 18(1), 521-542. <https://doi.org/10.17240/aibuefd.2018..-363264>
- Tösten, R., Arslantaş, H. İ., & Şahin, G. (2019). The effect of the positive psychological capital of the teachers on the work engagement. *Kastamonu Education Journal*, 27(3), 1073-1079. <https://doi.org/10.24106/kefdergi.2575>
- Valenta, R. L. (2010). *Effect of teacher engagement and teacher effectiveness on student achievement* [Unpublished doctoral dissertation]. Walden University.
- Van Wingerden, J., & Poell, R. F. (2019). Meaningful work and resilience among teachers: The mediating role of work engagement and job crafting. *PloS one*, 14(9), e0222518. <https://doi.org/10.1371/journal.pone.0222518>
- Van Wingerden, J., & Van der Stoep, J. (2018). The motivational potential of meaningful work: Relationships with strengths use, work engagement, and performance. *PloS one*, 13(6), e0197599. <https://doi.org/10.1371/journal.pone.0197599>
- Victor, S. R., & Patil, U. (2016). *Work engagement and teacher autonomy among secondary school teachers*. Anchor Academic Publishing.
- Viseu, J., Rus, C., & Jesus, S. N. (2015). How do organizational justice and health influence teachers' work engagement? *European Health Psychologist*, 17(4), 165-173.
- Willemse, M., & Deacon, E. (2015). Experiencing a sense of calling: The influence of meaningful work on teachers' work attitudes. *SA Journal of Industrial Psychology*, 41(1), 1-9. <https://doi.org/10.4102/sajip.v41i1.1274>
- Wiley, C. R. (2016). *Meaningful teaching: An interpretive phenomenological analysis of how international school teachers experience meaningful work* [Unpublished doctoral dissertation]. Northeastern University.
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31(1), 21-33. <https://doi.org/10.1006/jrpe.1997.2162>



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