



Research Article

## The Mediating Role of Self-Efficacy on the Relationship Between Mindfulness, Job Performance, and Career Satisfaction

### Bilinçli Farkındalık, İş Performansı ve Kariyer Tatmini Arasındaki İlişki Üzerinde Özyeterliliğin Aracı Rolü

Ceren Aydoğmuş<sup>a</sup>

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#### ABSTRACT

The present study aimed to examine the mediation effects of self-efficacy on the relationship between mindfulness and job performance and career satisfaction. For this purpose, a sample of 479 employees in various organizations in Turkey completed questionnaires that assessed their mindfulness, self-efficacy, job performance, and career satisfaction levels. The results for the correlation analyses displayed that mindfulness had positive relationships with self-efficacy, job performance, and career satisfaction. By utilizing Structural Equation Modeling, results for the mediational analyses indicated that mindfulness exerted its indirect effect on job performance and career satisfaction through self-efficacy. By conducting a multi-group analysis, it was found that the proposed mediational model was not moderated by gender, thereby providing support for the final meditational model's robustness. The study findings advance the understanding of how employees' mindfulness levels can influence their job performance and career satisfaction by focusing on their self-efficacy beliefs. The results underpin social cognitive theory and conservation of resources theory.

#### MAKALE BİLGİSİ

**Anahtar Kelimeler:**  
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#### ÖZ

Bu çalışmanın amacı bilinçli farkındalık ve iş performansı ile kariyer tatmini arasındaki ilişki üzerinde öz yeterliliğin aracılık etkilerini incelemektir. Bu amaçla, Türkiye'deki çeşitli kuruluşlardaki 479 çalışandan oluşan örneklem, farkındalık, öz yeterlilik, iş performansı ve kariyer tatmin düzeylerini değerlendiren anketleri doldürmüştür. Yapısal Eşitlik Modellemesi (YEM) kullanılarak yapılan aracı analizleri, bilinçli farkındalığın iş performansı ve kariyer tatmini üzerindeki dolaylı etkisinin öz-yeterlilik yoluyla ortaya çıktığını göstermiştir. Çoklu grup analizi yapılarak elde edilen aracılık modelinin cinsiyete göre düzenleyici rolü olmadığı tespit edilmiş ve böylece oluşturulan aracılık modelinin sağlamlığı desteklenmiştir. Elde edilen bulgular, çalışanların bilinçli farkındalık düzeylerinin iş performanslarını ve kariyer tatminlerini, öz yeterlilik algıları yoluyla nasıl etkilediğinin anlaşılmasına imkân sağlamıştır. Araştırma sonuçları, sosyal bilişsel teoriyi ve kaynakların korunması teorisini desteklemektedir.

<sup>a</sup> Corresponding Author, Dr., Department of Management, Bilkent University, Turkey, Email: caydogmus@bilkent.edu.tr, ORCID: 0000-0002-2982-2011

## 1. INTRODUCTION

Mindfulness has gathered much interest and attentiveness in the research literature over the last decades (Brown, Ryan & Creswell, 2007; Johnson, Park & Chaudhuri, 2020; Kong, Wang & Zhao, 2014). Mindfulness has been conceptualized as a process that causes a mental state depicted by a non-reactive and non-judgmental awareness of the experiences related to the present moment involving cognitions, emotions, feelings, and bodily sensations as well as external stimuli like sounds, smells, and sights (Brown & Ryan, 2003). Mindfulness is both considered a natural human capacity and a skill that can be nurtured through several diverse routes (Kabat-Zinn, 2003). In this sense, mindfulness can be also identified as a dispositional trait that signifies an inclination to be mindful in everyday life, in which people may be different from one another (Brown & Ryan, 2003). Nevertheless, mindfulness levels can be increased through mindfulness-based training (Falkenström, 2010). Mindfulness results in positive outcomes such as increased task performance (Dane, 2011), life satisfaction (Kong et al., 2014), job satisfaction, decreased turnover intentions (Andrews, Kacmar & Kacmar, 2014) and emotional exhaustion (Hülshager, Alberts, Feinholdt, & Lang, 2013). The extant literature also suggests that mindfulness is beneficial for job performance and career satisfaction (Bajaba, Fuller, Marler, & Bajaba, 2021; Butcher, 2020). Although some earlier studies have drawn attention to the direct relationship between these constructs (Bajaba et al., 2021; Dane & Brummel, 2014), the process for underlying the link among mindfulness and job performance and career satisfaction has remained so far unexplored. Hence, the present study was designed to explore whether the relationship among mindfulness and job performance and career satisfaction is mediated by self-efficacy. The theoretical rationale for this relationship can be found in the COR (conservation of resources) theory which suggests that individuals tend to go for gaining, protecting, and rebuilding the resources valued by the person (Hobfoll, 2001). While doing so, it is theorized that when employees experience high levels of mindfulness, they develop resources that may result in enhanced well-being perceptions such as self-efficacy which are predictive of their job performance and career satisfaction.

## 2. THEORETICAL FRAMEWORK AND HYPOTHESES

### 2.1. Mindfulness, Job Performance, and Career Satisfaction

Mindfulness emphasizes paying attention intentionally to the present moment in a non-judgmental and accepting way (Kabat-Zinn, 1990). Mindfulness refers to perceiving feelings, beliefs, thoughts, and physical sensations without annoying them, and without becoming crushed by them. Rather than performing with the “automatic pilot”, mindfulness specifies being aware of the present moment on being conscious (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006). Despite the conceptualization of mindfulness as being a state, research attracts attention to the differences in mindfulness-based on dispositions such that some people are more mindful when compared to others (Baer et al., 2006; Lau et al., 2006). Hence, it might be assumed that employees are different in terms of their mindfulness levels at work.

Research provides evidence for the positive influence of mindfulness on both job performance and career satisfaction. Job performance is one of the most important outcomes in the work settings and an emerging body of studies has displayed the relationships concerning mindfulness and performance (Dane & Brummel, 2014; Ostafin & Kassman, 2012). Mindful employees experience higher consideration for their feelings with a greater sense of clarity and lower levels of distraction in work settings. Additionally, such employees tend to recover from emotional distress more rapidly (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). Besides, higher mindfulness levels are associated with greater degrees of prosocial behaviors and less workplace deviance (Reb, Narayanan, & Ho, 2015). Mindful people have more judgment accuracy (Kiken & Shook, 2011) and experience higher levels of insight-related problem solving (Ostafin & Kassman, 2012). Furthermore, mindfulness is positively associated with high levels of alertness (Zeidan, Johnson, Diamond, David, & Goolkasian, 2010) and cognitive flexibility (Moore & Malinowski, 2009). Additionally, mindful people tend to deal better with performance blunders and distractions. Likewise, mindfulness may help employees' avoidance from mistakes, which may occur in terms of a departure from the present moment actions (Herndon, 2008). In line with such research suggestions, mindfulness has a positive influence on job performance by the factors such as increased judgment accuracy, high degrees of cognitive flexibility and alertness, and ability to handle distractions.

Career satisfaction denotes the extent that people believe their career development progress is

coherent with their aims, values, standards, and preferences (Ng, Eby, Sorensen, & Feldman, 2005). Although the number is not high, some empirical studies have drawn attention to the linkage concerning mindfulness and career satisfaction (Bajaba et al., 2021, Butcher, 2020). Emotional stability and conscientiousness levels of mindful people are relatively higher which results in higher job performance and better career management (Bajaba et al., 2021; Seibert, Kraimer, & Crant, 2001). It is suggested that mindful people tend to be more energetic, extroverted, outgoing, and joyful, which are the traits that are positively associated with career satisfaction as these traits are important for inter-personal interactions (Bajaba et al., 2021; Judge, Bono, Illies, & Gerhardt, 2002). Additionally, agreeableness levels of mindful employees are higher which is an advantage for building better relationships at work that may increase both job performance and career satisfaction (Seibert & Kraimer, 2001). To sum up, mindfulness has a positive influence on job satisfaction (Reb, Narayanan, & Chaturvedi, 2014) and overall satisfaction (Beach et al., 2013) while reducing employees' work withdrawal and burnout (Mesmer-Magnus, Manapragada, Viswesvaran, & Allen, 2017), and it is argued that mindfulness positively influences employees' career satisfaction as well.

## 2.2. Self-Efficacy as a Mediator

Self-efficacy has been defined as one's belief in which the person is capable of practicing and performing a responsibility or a task in a successful manner (Bandura, 1997). In a sense, self-efficacy can be considered a type of self-confidence (Kanter, 2006) and it is taken as an indicator of positive self-core evaluations (Judge & Bono, 2001).

Self-efficacy has an essential role in affecting decision-making, cognition, and one's behaviors. Based on the social cognitive theory, self-efficacy can be considered as being the capability for self-regulation and control of one's destiny (Bandura, 1986). Especially, general self-efficacy is considered the center of the mechanisms related to coping ability together with wide-scale functioning because of its direct relationship with coping skills (Luszczynska, Scholz & Schwarzer, 2005). Self-efficacy has been suggested to be a mediating variable among various coping mechanisms which in turn are correlated with positive behavioral responses (Luberto, Cotton, McLeish, Mingione, & O'Bryan, 2014; Tan, Yang, Ma, & Yu, 2016).

Research points out the positive impact of mindfulness on self-efficacy such that higher levels of mindfulness skills like accepting facts without

any judgment and behaving in an aware manner are associated with greater self-efficacy (Luberto, McLeish, Zvolensky, & Baer, 2011; Soysa & Wilcomb, 2015). Mindfulness improves understanding of the transitory nature of emotions that causes effectiveness for shaping an individual's life (Nydahl, 2008). Mindfulness is related to positive feelings such as competence and autonomy (Brown & Ryan, 2003). Additionally, mindfulness strengthens a greater sense of self-regulation and self-control that enhances one's self-efficacy (Luberto et al., 2011). In other words, increased perceived control as a result of mindfulness would cause higher levels of self-efficacy (Schiaffino & Revenson, 1992). Mindful people tend to better evaluate their self-views of the situations including places, objects, ideas, or individuals around them. Self-efficacy is the internal judgment of one's capabilities to achieve a certain degree of performance and mindfulness strengthens a person's focus on his/her goals and performance (McCann & Davis 2018). As Bandura (1997) has identified, self-efficacy sources include both affective and cognitive factors. People behave according to their interpretation of the realities and this process is intensely determined by their self-control, self-regulation, and self-awareness levels (Bandura, 1986). For instance, it would be quite difficult for individuals to concentrate on their thinking and assess their exact potential precisely when they are in a negative psychological condition like stress or anxiety. In this sense, experiencing high levels of self-efficacy would be hard with a lack of awareness (Gundlach, Martinko, & Douglas, 2003). As cognitive practices of making causal attributions among capabilities and performance consequences affect one's self-efficacy beliefs, higher levels of mindfulness may lead people to have more positive assessments due to its influence on pessimistic thoughts. The capability of observing one's mind actions non-judgmentally is related to a higher degree of realistic perceptions (Brown et al., 2007), and experiencing a clear mood of mind together with a high level of awareness strengthens the ability to think in a constructive way (Kabat-Zinn, 1990). It has been found that mindful people experience higher levels of cognitive flexibility and problem analysis capabilities. Additionally, mindful people have a higher capability while dealing with difficulties and challenges (Feldman et al., 2007) and experience greater self-efficacy (Charoensukmongkol, 2014). People, high in self-efficacy, have more optimistic perceptions about life and feel more self-confident that they can deal with stress and life events (Nasurdin, Ramayah, & Chee, 2009). Nonetheless, people, low in self-efficacy, experience higher stress and anxiety (Jimmieson, 2000). Thus, lower self-efficacy is strongly related to pessimistic thoughts (Schwarzer

& Hallum, 2008). Increased self-efficacy has been recommended to act as a primary mediator for positive outcomes (Luberto et al., 2014; Ngo & Hui, 2018). Hence, in the present study, it is suggested that mindfulness has a positive influence on employee self-efficacy, and enhanced self-efficacy may influence employees' job performance and career satisfaction levels.

Self-efficacy has a positive influence on work outcomes. It is strongly correlated with job performance (Judge & Bono, 2001; Carter, Nesbit, Badham, Parker, & Sung, 2018; Lunenburg, 2011) and career satisfaction (Abele & Spurk, 2009; Lounsbury et al., 2003; Ngo & Hui, 2018). Social cognitive theory suggests that self-efficacy is the main mechanism to be task-oriented and motivates better performance in various ways (Bandura, 1986). First of all, self-efficacy beliefs influence one's feelings related to confidence and competency in his/her perceived skills while performing a compulsory task which indicated that the person strives to achieve the goal (Bandura, 1997). Secondly, self-efficacy beliefs enhance performance by strengthening the sense of control the person experiences over his/her life circumstances (Bandura, 1986). Thirdly, self-efficacy beliefs build up a perception that effort will result in successful outcomes that raises one's ability while sustaining effort in pursuing his/her goals (Bandura, 1997). Employees, who have high self-efficacy scores, are more likely to show persistence in their work roles and pursue more challenging goals (Bandura, 2006). Self-efficacy affects the persistence degree of individuals while attempting hard/new tasks. Performance can't be evaluated as a pure measure of ability as it is also strongly influenced by self-regulatory factors such as self-efficacy (Bandura, 1997). Employees perform in parallel with their perceived self-efficacy levels. Employees, who are high in self-efficacy, feel self-confidence in learning and performing specific tasks. Hence, they don't give up showing their efforts when faced with different problems. Contrariwise, employees, who are low in self-efficacy, don't persist in showing effort when they have problems as they believe that they are incapacitated to performing difficult tasks (Lunenburg, 2011). Therefore, self-efficacy is suggested as an important predictor of job performance in work settings as self-perceived beliefs of efficacy significantly contribute to performance levels. The higher levels of self-efficacy beliefs will lead to greater coping performance (Bandura & Locke, 2003). Self-efficacy also affects employees' goals such that employees, low in self-efficacy, are likely to set moderately lower goals while employees, who feel

more self-efficacy, have a higher standard of personal goals (Lunenburg, 2011).

Career satisfaction has been defined as employees' feelings of satisfaction about their careers as a whole (Lounsbury et al., 2003). Objective or extrinsic factors such as status, promotions, and salary are less observable indicators of career satisfaction. Therefore, experiencing objective career success does not essentially identify that employees feel satisfied with their careers (Hall, 1996). On the other hand, subjective career success reflects one's feelings of personal achievement at work and reveals an individualistic perspective. Subjective career success has been defined as the subjective assessment of one's career (Abele & Spurk, 2009). Therefore, career satisfaction has been commonly used as the main measure of subjective career success (Colakoglu, 2011; Ng et al., 2005). Based on the social cognitive theory, self-efficacy has been suggested as an essential influencer of employees' career satisfaction levels (Abele & Spurk, 2009; Ngo & Hui, 2018). Within the context of social cognitive theory, employees who are high in self-efficacy experience more career satisfaction. Social cognitive theory, which holds an agentic approach related to human development, suggests that people are both producers and products of social systems such that the person, his/her environment, and behaviors are embedded in a mutually dependent causal structure (Bandura, 1986). Self-efficacy is the fundamental component of the theory as it is assessed as one of the crucial determinants of one's satisfaction and behavior through personal agency practices. Self-efficacious employees are likely to feel positive perceptions about their social environment and work activities (Bandura, 2012). Therefore, in line with the suggested mediation model in the study, the research literature supports the argument that high self-efficacy causes a high level of job performance and career satisfaction.

Grounded on the above rationale and existing literature displaying that mindfulness has positive effects on job performance and career satisfaction (Butcher, 2020; Dane, 2011), it also affects self-efficacy (Luberto et al., 2014), and self-efficacy correlates positively to job performance and career satisfaction (Carter et al. 2018; Ngo & Hui, 2018), in the present study both direct and indirect relationships between the variables are concerned. Therefore, based on the discussed literature leading to the anticipation of both the direct and indirect effects (through self-efficacy) of mindfulness on job performance and career satisfaction, the mediating influence is predicted partially. Hence, mindfulness may have direct impacts on job performance and

career satisfaction, but also indirect impacts through self-efficacy.

In summary, research has suggested that mindfulness is a valuable predictor of job performance and career satisfaction (Bajaba et al., 2021; Dane & Brummel, 2014). Apart from these linkages, research also points out the mediating role of self-efficacy on the relationship between mindfulness and positive outcomes (Sharma & Kumra 2022). There exists a significant positive correlation between mindfulness and self-efficacy (Bayır & Aylaz, 2021; Chan, Yu, & Li, 2021). Employees' mindfulness levels can foster their self-efficacy perceptions (Sharma & Kumra 2022). In turn, self-efficacy can promote employees' job performance and career satisfaction levels (Carter et al., 2018; Ngo & Hui, 2018). Hence, self-efficacy can be considered a mediator variable linking mindfulness with job performance and career satisfaction. The underpinning theory for the mediating role of self-efficacy on the relationship between mindfulness and job performance and career satisfaction is the conservation of resources (COR) theory, which emphasizes that people display every type of effort while protecting their interests and trying to achieve their goals (Hobfoll, 2001). Accrual of the resources that may induce positive emotional states like mindfulness can be considered a mechanism to reach this objective (Zivnuska, Kacmar, Ferguson, & Carlson, 2016). Being mindful would help people develop resources, which may result in experiencing enhanced well-being perceptions like self-efficacy (conservation of resources), and in turn display higher levels of job performance and career satisfaction. Hence, apart from its direct effects, mindfulness may act as a tool that leads to positive emotional states and attitudes that increases employees' self-efficacy perceptions, which in turn strengthen their job performance and career satisfaction.

This study is one of the rare attempts to examine the impact of mindfulness both on job performance and career satisfaction in a partial mediation model. Although there has been research on the benefits of mindfulness in many fields such as education (Weare, 2019), psychology (Phan et al., 2020), clinical psychology (Pintado, 2019), neuroscience (Brewer, 2019) and medicine (Chmielewski, 2021) in recent years, the effect of mindfulness on factors that have a crucial role in organizational effectiveness, such as job performance and career satisfaction, has not been studied much. Therefore, the current study contributes to the work literature by emphasizing the effects of mindfulness both on employees' job performance and career satisfaction levels. The positive psychology movements theory

(Csikszentmihalyi & Seligman, 2000) can be concerned to theoretically establish the relationship between mindfulness and job performance and career satisfaction. According to this theory, a person who has positive thoughts and feelings (through mindfulness) will show positive behaviors (e.g. job performance and career satisfaction) due to his/her positive psychology (with the help of mindfulness). Moreover, even if the impact of mindfulness on self-efficacy has been identified in several studies (Luberto et al., 2011; Soysa & Wilcomb, 2015), emphasizing the direct positive relationship of self-efficacy together with job performance and career satisfaction has not been included in the research arena. In this respect, this study also supports the social cognitive theory (Bandura, 1986) specifying the role of self-efficacy on positive work outcomes such as job performance and career satisfaction (Carter et al., 2018; Ngo & Hui, 2018). Finally, to the author's knowledge, no study up to date has been conducted to analyze the influence of mindfulness on job performance through self-efficacy and to investigate the impacts of mindfulness on career satisfaction via self-efficacy with employees' sample in the Turkish context. Thus it is predicted that:

*Hypothesis:* Self-efficacy partially mediates the relationship between mindfulness and job performance and career satisfaction.

### 3. METHOD

#### 3.1. Participants and Procedure

The study participants were 479 white-collar employees from various Turkish companies found in the IT, textile, energy, education, marketing, finance and audit sectors. The reason for not focusing on a specific sector was to have a diverse research sample as much as possible. The companies were chosen based on a convenience basis and the participants were selected by convenience sampling. Out of the 800 questionnaires distributed online, 479 questionnaires were returned with a 59% response rate. All participants were assured of the confidentiality and anonymity of the research. Among the participants, 57% were male and 43% female.

#### 3.2. Measures

*3.2.1. Mindfulness.* Mindfulness levels were evaluated by the fifteen-item Mindfulness Attention Awareness Scale (Brown & Ryan, 2003). The scale is a single-factor measure of mindfulness skills for which the participants rate how often each related

statement is convenient for them. The participants answered the questions on a six-point Likert type scale ranging from 1 (almost always) to 6 (almost never). A sample item is "I find it difficult to stay focused on what's happening in the present" (reverse-coded). The Turkish version of the scale was applied by Catak (2012). Research has provided evidence for the good internal consistency, discriminant validity, and convergency scores of the scale (Baer et al., 2006; Dane & Brummel, 2014).

**3.2.2 Self-Efficacy.** Participants' self-efficacy levels were assessed by the ten-item scale, which is a unidimensional measure of general self-efficacy (Schwarzer & Jerusalem, 1995). A sample item is "I can solve most problems if I invest the necessary effort" rated on a four-point Likert scale from 1 (not at all true) to 4 (exactly true). The Turkish adaptation of the instrument was taken from Yeşilay, Schwarzer, and Jerusalem (1996). In different samples from more than 23 nations, the scale has good reliability and validity (Abele & Spurk, 2009; Carter et al., 2018; Charoensukmongkol, 2014)

**3.2.3. Job Performance.** Job performance scores were measured with the five-item scale for in-role job performance developed by Podsakoff, Mackenzie, Moorman, and Fetter (1990). The participants expressed their agreement on a five-point Likert scale from 1 (disagree strongly) to 5 (agree strongly). A sample item is "I meet all the formal performance requirements of the job". The Turkish adaptation of the scale was conducted by Ünüvar (2006). The scale has good reliability and validity levels (Chughtai, 2008; Halbesleben & Bowler, 2007).

**3.2.4. Career Satisfaction.** Participants' career satisfaction levels were evaluated by the five-item scale (Greenhaus, Parasuraman, & Wormley, 1990) from 1 (disagree strongly) to 5 (agree strongly). An example item is "I am satisfied with the success I have achieved in my career". The Turkish version of the scale was applied by Kaya and Karatepe (2020). Research has provided verification for the good reliability and validity of the scale (Aydogmus, 2019; Colakoglu 2011).

**3.2.5. Control Variables.** Age, gender, and job tenure were taken as control variables in line with the suggestions of past research for the prominence of controlling for demographics (Halbesleben & Bowler, 2007; Reb, Narayanan, Chaturvedi & Ekkirala, 2017).

### 3.3. Data Analysis

By utilizing AMOS 18.0, the Structural Equation Modeling (SEM) was used to examine the influence of employees' self-efficacy on the relationship among their mindfulness scores and job performance levels and career satisfaction. Various indices, which were suggested by Hu and Bentler (1999), were used while assessing the overall fit of the suggested model to the data. The criteria for a good fit (Hu and Bentler, 1999) is as follows:  $\chi^2/df$  ratio  $< 3$ ; Root-Mean-Square Error of Approximation (RMSEA)  $< .06$ ; Standardized Root-Mean-square Residual (SRMR)  $< .08$ ; Comparative Fit Index (CFI)  $> .95$ . PClose value identifies the test of statistical significance related with the test of close fits. PClose value, which is smaller than .05 implies that RMSEA is significantly higher than its suggested cut-off of .05, so a probability higher than .05 is desirable.

In order to control the inflated measurement errors that were affected by the multiple substances of the latent factor, for each of the mindfulness and self-efficacy factors, three item parcels and for each of the job performance and career satisfaction components two item parcels were composed in the analyses. There is no single answer to how many parcels should be created in one-dimensional structures (Little, Rhemtulla, Gibson, & Schoemann, 2013). The reason for composing two item parcels for each of the job performance and career satisfaction five-item scales was to guarantee obtaining sufficient goodness-of-fit values depending on the sample size (e.g. Kline, 2011). The parcels in the study were formed by utilizing a balanced approach of item-to-construct like allocating the highest and lowest loading items through the parcels (Little, Cunningham, Shahar & Widaman, 2002).

## 4. RESULTS

### 4.1. Preliminary Analysis

Table 1 indicates the means, standard deviations, internal consistency reliabilities, and correlations of the variables

**Table 1:** Mean, Standard Deviations, reliabilities, and intercorrelations between study variables

Variable	Mean	SD	1	2	3	4	5	6	7
1. Gender	-	-	-	-	-	-	-	-	-
2. Age	37.3	1.3	-0.07	-	-	-	-	-	-
3. Job Tenure	4.8	1.06	-0.19	0.58	-	-	-	-	-
4. Mindfulness	3.9	0.79	0.05	-0.19	-0.61	(0.89)	-	-	-
5. Self-Efficacy	2.7	0.42	-0.11	0.09	0.27	0.45**	(0.83)	-	-
6. Job performance	3.7	0.76	0.08	-0.16	0.07	0.43**	0.31**	(0.82)	-
7. Career satisfaction	3.8	0.68	0.15	0.08	-0.04	0.44**	0.57**	0.46**	(0.84)

Note: N = 479, SD: Standard deviation, Gender is coded as 0 = woman, 1 = man, Cronbach's Alpha ( $\alpha$ ) coefficients are in parentheses in the diagonal.

\*\*p < 0.01

As seen in Table 1, mindfulness was positively and significantly related to self-efficacy ( $r = 0.45$ ;  $p < 0.01$ ), job performance ( $r = 0.43$ ;  $p < 0.01$ ) and career satisfaction ( $r = 0.44$ ;  $p < 0.01$ ). Furthermore, self-efficacy was positively and significantly related to job performance ( $r = 0.31$ ;  $p < 0.01$ ) and career satisfaction ( $r = 0.57$ ;  $p < 0.01$ ). Lastly, career satisfaction was found to have a positive significant relationship with job performance ( $r = 0.46$ ;  $p < 0.01$ ).

#### 4.2. Measurement Model

The measurement model contains four latent factors including mindfulness, self-efficacy, job performance, and career satisfaction together with 10 observed variables. The preliminary analysis for the measurement model displayed a very good fit to the data ( $\chi^2 = 33.6$ ,  $df = 29$ ;  $p = .302$ ;  $RMSEA = .026$ ;  $PClose = .978$ ;  $SRMR = .021$ ; and  $CFI = .986$ ). For the indicators on the latent variables, the reliable factor loadings displayed that respective indicators were correct representatives for their latent factors. The four-factor model showed superior fit when compared to one-factor model where all parcels were loaded on a single factor ( $\chi^2 = 174.3$ ,  $df = 33$ ;  $p = .101$ ;  $RMSEA = .11$ ;  $PClose = .02$ ;  $SRMR = .09$ ; and  $CFI = .69$ ).

displayed a very good fit to data ( $\chi^2 = 61.6$ ,  $df = 30$ ;  $p = .001$ ;  $RMSEA = .041$ ;  $PClose = .488$ ;  $SRMR = .017$ ; and  $CFI = .981$ ).

Figure 1 displays the partial mediation impact of self-efficacy on the relationships concerning mindfulness, job performance, and career satisfaction indicating that all of the direct path coefficients were significant for the suggested directions.

For testing the hypothesis of self-efficacy partially mediating the mindfulness, job performance, and career satisfaction relationship; Model 2, which was a full mediation model including the direct paths from mindfulness to job performance and career satisfaction constrained to zero was conducted to compare with the partial mediation model of Model 1 involving the above direct paths not constrained to zero. Chi square difference test was applied for the comparison. The results indicated that the fit for the model has reduced significantly ( $\Delta\chi^2 (2, N = 479) = 32.0$ ,  $p < 0.05$ ) after eliminating the above direct paths. Thus, Model 1, which was the partial mediation model, was noticeably better than Model 2. Afterward, concerning the direct relationships between the variables, a third partially mediated model (Model 3) including job performance and career satisfaction as mediators between

**Table 2:** Fit indices of the models

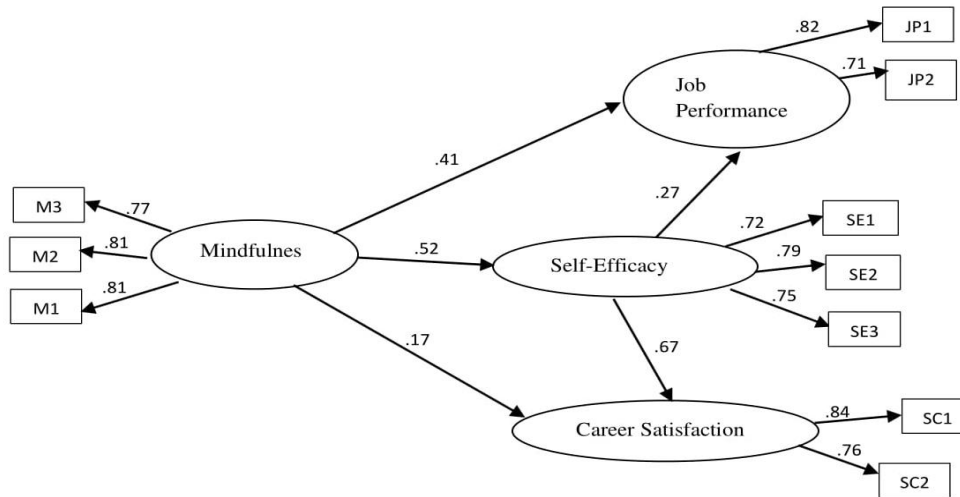
Variable	$\chi^2$	df	$\chi^2/df$	RMSEA	SRMR	CFI	AIC	ECVI
Model 1	61.6	30	2.053	0.041	0.017	0.981	111.294	0.247
Model 2	91.3	32	2.853	0.065	0.026	0.964	137.283	0.333
Model 3	70.3	30	2.343	0.056	0.021	0.975	121.327	0.286

Note: N = 479, RMSEA = root-mean square error of approximation; SRMR = standardized root-mean-square residual; CFI = Comparative Fit Index; AIC = Akaike information criterion; ECVI = Expected cross-validation index.

#### 4.3. Structural Model

The suggested structural relationships for the study variables were tested by using AMOS 18.0 in the present study. Three alternative models were conducted to find the best model. Table 2 shows the fit indices regarding the alternative models. As seen, Model 1, which was the hypothesized model,

mindfulness and self-efficacy was analyzed in order to investigate the possible diverse mediating effects that may arise, which is shown in Figure 2.



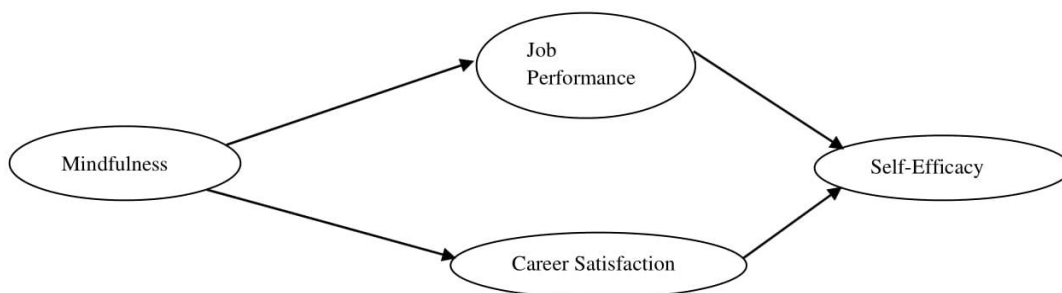
Note: The factor loadings are standardized. M1-M3= Three parcels for mindfulness; SE1-SE3=Three parcels for self-efficacy; JP1-JP2= Two parcels for job performance; CS1-CS2=Two parcels for career satisfaction.

**Figure 1:** Structural Equation Model for the mediating impact of self-efficacy on the linkages between mindfulness, job performance, and career satisfaction

Even though Model 3 fits worse than Model 1 ( $\chi^2 = 70.3$ ,  $df = 30$ ;  $p = .000$ ;  $RMSEA = .056$ ;  $PClose = 0.247$ ;  $SRMR = .021$ ; and  $CFI = .975$ ), it was still a well-fitting model. However, based on the previous literature, it has been suggested that self-efficacy predicts both job performance and career satisfaction (Abele & Spurk, 2009; Carter et al., 2018; Judge & Bono, 2001; Ngo & Hui, 2018). Additionally, the fit indices of Model 1 were better compared with Model 3. As a result, we can conclude that, based on the results of the analyses, Model 1 was the best one when compared with the other models. Hence, it was determined that employees' self-efficacy perceptions partially mediated the linkage among their mindfulness and job performance and career satisfaction levels.

#### 4.4. Mediation Assessment

Bootstrapping techniques in AMOS were conducted to examine the significance of the mediation influence of self-efficacy. For the stated reason, by random sampling, 5000 bootstrapping samples were generated from the original data set ( $N = 479$ ). Table 3 presents the mediating impact of self-efficacy involving the 95% confidence intervals. Findings showed that mindfulness exerted its indirect influence on job performance and career satisfaction through with the mediating influence of self-efficacy.



**Figure 2:** Alternative model including job performance and career satisfaction as mediators between mindfulness and self-efficacy



**Table 3:** Bootstrapping indirect effects including 95% confidence intervals (CI)

Model Pathways	Point Estimates	95% CI	
		Lower	Upper
Mindfulness => Self-efficacy => Job Performance	0.357	0.267	0.472
Mindfulness => Self-efficacy => Career Satisfaction	0.123	0.032	0.236

#### 4.5. Gender Differences

Studies have pointed out that men and women may differ in terms of their mindfulness levels, self-efficacy, job performance and career satisfaction, and relationships between these variables (Bajaba et al., 2021; Lo, 2021; Tabatabaei, SJashani, Mataji, & Afsar, 2013; You & Yoo, 2021). Therefore, in order to determine whether the path coefficients differ significantly between males and females, multi-group analysis was used in the present study. While examining these gender differences, the first model enabling the structural paths to differ between sexes, was compared with the second one that restrained the structural paths among males and females to be equal. The results displayed that the restrained model was not significantly diverse from the first one, ( $\Delta\chi^2(4, N = 479) = 4.08, p > .05$ ), signifying that there were no significant gender differences among sexes. Further, concerning the magnitude for female and male groups, an inspection of each path coefficient verified that all of the associations were similar. As seen, the robustness of the final meditational model was supported by these results.

## 5. DISCUSSION AND IMPLICATIONS

The purpose of the present study was to explore the mediating influence of self-efficacy on the relationships between mindfulness, job performance, and career satisfaction. It was found that more mindful employees exhibited higher levels of job performance and career satisfaction. Specifically, it was hypothesized that these relationships were partially mediated by employees' self-efficacy perceptions. The present study supported the hypothesized relationships such that mindfulness and job performance and career satisfaction linkages were partially mediated by self-efficacy in the organizations within the Turkish context.

The present study builds numerous notable theoretical contributions. The study contributes to the emerging research field that examines the effect of mindfulness in work settings in general (Reb & Atkins, 2015) and the impact of mindfulness on self-efficacy, job performance, and career satisfaction specifically. In the study, correlational

results displayed that mindfulness was positively related to employees' self-efficacy levels, job performance assessments, and career satisfaction scores. These findings are in line with the previous research confirming the positive relationships between mindfulness and self-efficacy (Luberto et al. 2011; Soysa & Wilcomb, 2015), job performance (Bajaba et al. 2021; Dane & Brummel 2014), and career satisfaction (Butcher, 2020; McAbee et al., 2015). Mindful individuals have a greater sense of self-control and self-regulation which in turn increase their self-efficacy levels (Luberto et al., 2011). Moreover, mindful people have more attention to feelings and experience lower distraction (Feldman et al., 2007). Thus, mindfulness enhances job performance by guarding in opposition to performance blunders and distractions (Herndon, 2008) and by increasing alertness and cognitive flexibility (Zeidan et al., 2010). Concerning career satisfaction, having a high level of mindfulness may cause employees to the accrual of important career resources (Hülshager et al., 2013) that can be evaluated as psychological assets which can generate additional outcomes (Voydanoff, 2005) that might be related to the employees' career satisfaction.

Additionally, the positive relationships between self-efficacy and job performance and career satisfaction are consistent with the previous research suggesting a positive correlation among these variables (Lunenborg, 2011; Abele & Spurk, 2009). In this sense, the present study contributes to the social cognitive theory (Bandura, 1986), which signifies that self-efficacy beliefs enhance one's motivation and have a positive influence on conscious practices and outcomes such as job performance (Carter et al., 2018) and career satisfaction (Ngo & Hui, 2018).

The most critical outcome of this research is that self-efficacy acted as a mediator of the relationships between mindfulness and job performance and career satisfaction. Study findings demonstrate a framework indicating that mindful employees are more likely to experience high levels of self-efficacy, which in turn increase their job performance and career satisfaction levels. With this framework, the current study contributes to the COR, which suggests people show every effort to reach their goals and protect their desires and interests (Hobfoll, 2001). One of the mechanisms that can be used to achieve this objective is the

accrual of the resources that may cause positive emotional attitudes and states such as mindfulness (Zivnuska et al., 2016). It is believed that mindfulness acts as a tool that results in positive emotional states which enhances employees' self-efficacy perceptions. In turn, these employees may display increased job performance and experience enhanced career satisfaction. Although some previous studies have examined the relationship between mindfulness and job performance and career satisfaction (Bajaba et al., 2021; Dane & Brummel, 2014), no study up to date has examined self-efficacy as a mediator among these variables. The multi-group analysis results demonstrated that there were no significant gender differences.

Finally, even if the present study didn't aim for a cultural perspective, it contributed to the emerging literature about work and organizations in Turkey. It adds to a relatively small body of research on mindfulness including samples beyond Europe and the USA (Reb et al., 2017), thus contributing to the understanding of the generalizability of mindfulness findings across diverse cultures.

The study has also several practical implications for managers and organizations in understanding the factors that affect employees' job performance and career satisfaction. It is suggested that organizations can enhance employee job performance, as well as increase career satisfaction, by finding ways to raise self-efficacy. The study draws attention to mindfulness as a crucial path toward increasing self-efficacy of employees. In this sense, the present study alludes to the importance of helping employees develop their mindfulness levels. Employees' mindfulness levels can be increased by training and practices. Research has provided evidence on mindfulness-related training programs like MBSR (Mindfulness-Based Stress Reduction) for increasing individuals' mindfulness scores (Bohecker, & Doughty Horn, 2016; Johnson et al., 2020). Employees tend to alter their emotional and cognitive aspects positively when they have mindfulness training programs. Mindfulness practices became appropriate and widespread because of the positive mind and brain effects on both physical and psychological health (Beach et al., 2013; Brown et al., 2007). Experiencing positive emotion self-regulation, being self-aware, motivation and self-efficacy are some of the outcomes of mindfulness training programs at the individual level. Furthermore, job productivity, work-related mental health, job performance, and career satisfaction can be considered as some of the job-related outcomes of such interventions (Bajaba et al., 2021; Johnson et al., 2020; Ostafin & Kassman, 2012). Organizations can also search for other ways to increase employee mindfulness in

addition to the training programs. For instance, employee mindfulness was determined lower when the assigned tasks were routine and organizational constraints were a lot (Reb et al., 2015). Hence, organizations could lessen the constraints and assign less routine tasks thereby giving support to strengthen employee mindfulness.

This study has also some limitations, which may take attention for future research. First of all, the study used cross-sectional data which makes it hard to illustrate any causal associations between the variables. In the future, longitudinal research can be conducted while examining the mediation model. Second, only one mediating variable was used in the current study. The theory concerning the relationships between employee mindfulness and job performance and career satisfaction can be further developed by analyzing and confirming other mediators. Third, self-report measures were used in the data collection. In future research, multiple assessment methods such as manager and peer reports might be utilized for strengthening the validity of the study findings.

Apart from the stated limitations, the present study is the initial effort in examining self-efficacy as a mediator between mindfulness and job performance and career satisfaction concerning employees in the Turkish companies. Collecting data from Turkish employees' sample may also offer significant proof validity for mindfulness as the predictor of self-efficacy, job performance, and career satisfaction.

## ETHICS DECLARATIONS

**Funding:** No grant funding was obtained or utilized for the completion of this study.

**Conflict of interest:** The author declares that she has no conflict of interest.

**Ethical Approval:** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. Ethics Committee Approval was obtained for this research from the Bilkent University Research Ethics Committee with the date of April, 1 and the decision number 2022\_04\_01\_02.

**Informed Consent:** Informed consent was obtained from all individual participants included in the study.

## REFERENCES

- Abele, A.E. & Spurk, D. (2009). The longitudinal impact of self-efficacy and career goals on objective and subjective career success. *Journal of Vocational Behavior*, 74(1), 53-62. doi.org/10.1016/j.jvb.2008.10.005
- Andrews, M.C., Kacmar, K.M. & Kacmar, C. (2014). The mediational effect of regulatory focus on the relationships between mindfulness and job satisfaction and turnover intentions. *Career Development International*, 19(5), 494-507. doi.org/10.1108/CDI-02-2014-0018
- Aydogmus, C. (2019). Millennial knowledge workers: The roles of protean career attitudes and psychological empowerment on the relationship between emotional intelligence and subjective career success. *Career Development International*, 24(4), 297-314. doi.org/10.1108/CDI-06-2018-0165
- Baer R.A., Smith G.T., Hopkins J, Krietemeyer J. & Toney L (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45. doi.org/10.1177%2F1073191105283504
- Bajaba, S., Fuller, B., Marler, L. & Bajaba, A. (2021). Does mindfulness enhance the beneficial outcomes that accrue to employees with proactive personalities? *Current Psychology*, 40(2), 475-484. doi.org/10.1007/s12144-018-9995-3
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York, NY: W.H. Freeman
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1, 164-180. doi.org/10.1111/j.1745-6916.2006.00011.x
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. doi.org/10.1177/0149206311410606
- Bandura, A. & Locke, E.A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*, 88(1), 87-100. psycnet.apa.org/doi/10.1037/0021-9010.88.1.87
- Bayır, B., & Aylaz, R. (2021). The effect of mindfulness-based education given to individuals with substance-use disorder according to self-efficacy theory on self-efficacy perception. *Applied Nursing Research*, 57, 1-8. doi.org/10.1016/j.apnr.2020.151354
- Beach, M.C., Roter, D., Korhuis, P.T., Epstein, R.M., Sharp, V., Ratanawongsa, N., Cohn, J., Eggly, S., Sankar, A., Moore, R.D. & Saha, S. (2013). A multicenter study of physician mindfulness and health care quality. *The Annals of Family Medicine*, 11, 421-428. doi.org/10.1370/afm.1507
- Bohecker, L. & Doughty Horn, E.A. (2016). Increasing students' empathy and counseling self-efficacy through a mindfulness experiential small group. *The Journal for Specialists in Group Work*, 41(4), 312-333. doi.org/10.1080/01933922.2016.1232322
- Brewer, J. (2019). Mindfulness training for addictions: has neuroscience revealed a brain hack by which awareness subverts the addictive process? *Current Opinion in Psychology*, 28, 198-203. doi.org/10.1016/j.copsyc.2019.01.014
- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822-848. doi.org/10.1037/0022-3514.84.4.822
- Brown, K.W., Ryan, R.M. & Creswell, J.D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4), 211-237. doi.org/10.1080/10478400701598298
- Butcher, L. (2020). When Mindfulness Equals Career Satisfaction. *Neurology Today*, 20(6), 24-26.
- Carter, W.R., Nesbit, P.L., Badham, R.J., Parker, S.K. & Sung, L.K. (2018). The effects of employee engagement and self-efficacy on job performance: a longitudinal field study. *The International Journal of Human Resource Management*, 29(17), 2483-2502. doi.org/10.1080/09585192.2016.1244096
- Catak, P.D. (2012). The Turkish version of mindful attention awareness scale: preliminary findings. *Mindfulness*, 3(1), 1-9. doi.org/10.1007/s12671-011-0072-3
- Chan, S.H., Yu, C.K.C., & Li, A.W. (2021). Impact of mindfulness-based cognitive therapy on counseling self-efficacy: A randomized controlled crossover trial. *Patient Education and Counseling*, 104(2), 360-368. doi.org/10.1016/j.pec.2020.07.022
- Charoensukmongkol, P. (2014). Benefits of mindfulness meditation on emotional intelligence, general self-efficacy, and perceived stress: Evidence from Thailand. *Journal of Spirituality in Mental Health*, 16(3), 171-192. doi.org/10.1080/19349637.2014.925364
- Chmielewski, J. (2021). Mindfulness in healthcare professionals and medical education. *International Journal of Occupational Medicine and Environmental Health*, 34(1), 1-14. doi.org/10.13075/ijomeh.1896.01542

- Chughtai, A.A. (2008). Impact of job involvement on in-role job performance and organizational citizenship behaviour. *Journal of Behavioral and Applied Management*, 9(2), 169-183.
- Colakoglu, S.N. (2011). The impact of career boundarylessness on subjective career success: The role of career competencies, career autonomy, and career insecurity. *Journal of Vocational Behavior*, 79(1), 47-59. doi.org/10.1016/j.jvb.2010.09.011
- Csikszentmihalyi, M., & Seligman, M. (2000). Positive psychology. *American Psychologist*, 55(1), 5-14.
- Dane, E. (2011). Paying attention to mindfulness and its effects on task performance in the workplace. *Journal of Management*, 37(4), 997-1018. doi.org/10.1177%2F0149206310367948
- Dane, E. & Brummel, B.J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human Relations*, 67, 105–128. doi.org/10.1177%2F0018726713487753
- Falkenström, F. (2010). Studying mindfulness in experienced meditators: A quasi experimental approach. *Personality and Individual Differences*, 48(3), 305–310. doi.org/10.1016/j.paid.2009.10.022
- Feldman, G., Hayes, A., Kumar, S., Greeson, J. & Laurenceau, J.P. (2007). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of Psychopathology and Behavioral Assessment*, 29(3), 177-190.
- Greenhaus, J.H., Parasuraman, S. & Wormley, W. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64-86. doi.org/10.5465/256352
- Gundlach, M.J., Martinko, M.J. & Douglas, S.C. (2003). Emotional intelligence, causal reasoning, and the self-efficacy development process. *International Journal of Organizational Analysis*, 11(3), 229–246. doi.org/10.1108/eb028974
- Halbesleben, J.R.B. & Bowler, W.M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93–106. psycnet.apa.org/doi/10.1037/0021-9010.92.1.93
- Hall, D.T. (1996). Protean careers of the 21st century. *Academy of Management Executive*, 10(4), 8-16. /doi.org/10.5465/ame.1996.3145315
- Herndon F. (2008). Testing mindfulness with perceptual and cognitive factors: External vs. internal encoding, and the cognitive failures questionnaire. *Personality and Individual Differences*, 44(1), 32–41. doi.org/10.1016/j.paid.2007.07.002
- Hobfoll, S.E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337-370. doi.org/10.1111/1464-0597.00062
- Hu, L.T. & Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. doi.org/10.1080/10705519909540118
- Hülshager, U.R., Alberts, H.J., Feinholdt, A. & Lang, J.W. (2013). Benefits of mindfulness at work: the role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, 98(2), 1-16. psycnet.apa.org/doi/10.1037/a0031313
- Jimmieson, N.L. (2000). Employee reactions to behavioural control under conditions of stress: The moderating role of self-efficacy. *Work & Stress*, 14(3), 262–280. doi.org/10.1080/02678370010015343
- Johnson, K.R., Park, S. & Chaudhuri, S. (2020). Mindfulness training in the workplace: Exploring its scope and outcomes. *European Journal of Training and Development*, 44(4/5), 341-354. doi.org/10.1108/EJTD-09-2019-0156
- Judge, T.A. & Bono, J.E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86(1), 80-92.
- Judge, T.A., Bono, J. E., Illies, R. & Gerhardt, M.W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765–780. doi.org/10.1037//0021-9010.87.4.765
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delacorte Press.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144–156. psycnet.apa.org/doi/10.1093/clipsy.bpg016
- Kanter, R. M. (2006). *Confidence: How winning and losing streaks begin and end*. New York, NY: Crown Publishing
- Kaya, B. & Karatepe, O.M. (2020). Does servant leadership better explain work engagement, career satisfaction and adaptive performance than authentic leadership? *International Journal of Contemporary Hospitality Management*, 2075-2095. doi.org/10.1108/IJCHM-05-2019-0438

- Kiken L.G. & Shook N.J. (2011). Looking up: Mindfulness increases positive judgments and reduces negativity bias. *Social Psychological and Personality Science*, 2(4), 425–431. doi.org/10.1177%2F1948550610396585
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3. ed). New York, NY: Guilford Press.
- Kong, F., Wang, X. & Zhao, J. (2014). Dispositional mindfulness and life satisfaction: The role of core self-evaluations. *Personality and Individual Differences*, 56, 165–169. doi.org/10.1016/j.paid.2013.09.002
- Lau M.A., Bishop S.R., Segal Z.V., Buis T., Anderson N.D., Carlson L., Shapiro S. & Carmody J. (2006). The Toronto Mindfulness Scale: Development and validation. *Journal of Clinical Psychology*, 62(12), 1445–1467. doi.org/10.1002/jclp.20326
- Little, T.D., Cunningham, W.A., Shahar, G. & Widaman, K.F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 151–173. doi.org/10.1207/S15328007SEM0902\_1
- Little, T.D., Rhemtulla, M., Gibson, K., & Schoemann, A. (2013). Why the items versus parcels controversy needn't be one? *Psychological Methods*. 18(3), 285–300. doi.org/10.1037%2Fa0033266
- Lo, H.H.M. (2021). Quality of life among adolescents in Hong Kong: General and gender-specific effects of self-efficacy and mindfulness. *Applied Research in Quality of Life*, 16(6), 2311–2334. doi.org/10.1007/s11482-021-09914-w
- Lounsbury, J.W., Loveland, J.M., Sundstrom, E.D., Gibson, L.W., Drost, A.W. & Hamrick, F.L. (2003). An investigation of personality traits in relation to career satisfaction. *Journal of Career Assessment*, 11(3), 287–307. doi.org/10.1177%2F1069072703254501
- Luberto, C.M., Cotton, S., McLeish, A.C., Mingione, C. J. & O'Bryan, E. M. (2014). Mindfulness skills and emotion regulation: The mediating role of coping self-efficacy. *Mindfulness*, 5(4), 373–380. doi.org/10.1007/s12671-012-0190-6
- Luberto, C.M., McLeish, A.C., Zvolensky, M.J. & Baer, R.A. (2011). Mindfulness skills and anxiety-related cognitive processes among young adult daily smokers: a pilot test. *Mindfulness*, 2, 129–136. doi.org/10.1007/s12671-011-0052-7
- Lunenburg, F.C. (2011). Self-efficacy in the workplace: Implications for motivation and performance. *International Journal of Management, Business, and Administration*, 14(1), 1–6.
- Luszczynska, A., Scholz, U. & Schwarzer, R. (2005). The general self-efficacy scale: multicultural validation studies. *The Journal of Psychology*, 139(5), 439–457. https://doi.org/10.3200/JRLP.139.5.439-457
- McAbee, J. H., Ragel, B.T., McCartney, S., Jones, G.M., Michael, L.M., DeCuyper, M., ... & Klimo, P. (2015). Factors associated with career satisfaction and burnout among US neurosurgeons: results of a nationwide survey. *Journal of Neurosurgery*, 123(1), 161–173. doi.org/10.3171/2014.12.JNS141348
- McCann, K.M. & Davis, M. (2018). Mindfulness and Self-Efficacy in an Online Doctoral Program. *Journal of Instructional Research*, 7, 33–39.
- Mesmer-Magnus, J., Manapragada, A., Viswesvaran, C. & Allen, J.W. (2017). Trait mindfulness at work: A meta-analysis of the personal and professional correlates of trait mindfulness. *Human Performance*, 30, 79–98. doi.org/10.1080/08959285.2017.1307842
- Moore, A. & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18(1), 176–186. doi.org/10.1016/j.concog.2008.12.008
- Nasurdin, A.M., Ramayah, T. & Chee, B.Y. (2009). The impacts of structure, climate and self-efficacy on stress: A Malaysian survey. *Asian Academy of Management Journal*, 14(1), 59–79.
- Ng, T.W.H., Eby, L.T., Sorensen, K.L. & Feldman, D.C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58, 367–408. doi.org/10.1111/j.1744-6570.2005.00515.x
- Ngo, H.Y. & Hui, L. (2018). Individual orientations and career satisfaction: The mediating roles of work engagement and self-efficacy. *Journal of Career Development*, 45(5), 425–439. doi.org/10.1177%2F0894845317706759
- Nydahl, O. (2008). *The way things are*. UK: O Books.
- Ostafin B.D. & Kassman K.T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition*, 21(2), 1031–1036. doi.org/10.1016/j.concog.2012.02.014
- Phan, H.P., Ngu, B.H., Chen, S.C., Wu, L., Shi, S.Y., Lin, R.Y., Shih, J.H., & Wang, H.W. (2020). Advancing the study of positive psychology: the use of a multifaceted structure of mindfulness for development. *Frontiers in Psychology*, 11(1602), 1–19. doi.org/10.3389/fpsyg.2020.01602
- Pintado, S. (2019). Changes in body awareness and self-compassion in clinical psychology trainees through a mindfulness program. *Complementary Therapies in Clinical Practice*, 34, 229–234. doi.org/10.1016/j.ctcp.2018.12.010

- Podsakoff, P.M., Mackenzie, S.B., Moorman, R.H. & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. *Leadership Quarterly*, 1, 107 – 142. [https://doi.org/10.1016/1048-9843\(90\)90009-7](https://doi.org/10.1016/1048-9843(90)90009-7)
- Reb, J. & Atkins, P.W.B. (Eds.). (2015). *Mindfulness in organizations: Foundations, research, and applications*. Cambridge, UK: Cambridge University Press.
- Reb, J., Narayanan, J. & Chaturvedi, S. (2014). Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance. *Mindfulness*, 5, 36–45. [doi.org/10.1007/s12671-012-0144-z](https://doi.org/10.1007/s12671-012-0144-z)
- Reb, J., Narayanan, J. Chaturvedi, S. & Ekkirala, S. (2017). The mediating role of emotional exhaustion in the relationship of mindfulness with turnover intentions and job performance. *Mindfulness*, 8(3), 707-716. [doi.org/10.1007/s12671-016-0648-z](https://doi.org/10.1007/s12671-016-0648-z)
- Reb, J., Narayanan, J. & Ho, Z.W. (2015). Mindfulness at work: Antecedents and consequences of employee awareness and absent-mindedness. *Mindfulness*, 6, 111–122. [doi.org/10.1007/s12671-013-0236-4](https://doi.org/10.1007/s12671-013-0236-4)
- Schiaffino, K.M. & Revenson, T.A. (1992). The role of perceived self-efficacy, perceived control, and causal attributions in adaptation to rheumatoid arthritis: distinguishing mediator from moderator effects. *Personality and Social Psychology Bulletin*, 18, 709–718. [doi.org/10.1177/0146167292186007](https://doi.org/10.1177/0146167292186007)
- Schwarzer, R. & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology: An International Review*, 57, 152–171. [doi.org/10.1111/j.1464-0597.2008.00359.x](https://doi.org/10.1111/j.1464-0597.2008.00359.x)
- Schwarzer, R. & Jerusalem, M. (1995). Generalized self-efficacy scale. Measures in health psychology: A user's portfolio. *Causal and Control Beliefs*, 1(1), 35-37.
- Seibert, S.E. & Kraimer, M.L. (2001). The five-factor model of personality and career success. *Journal of Vocational Behavior*, 58, 1–21. [doi.org/10.1006/jvbe.2000.1757](https://doi.org/10.1006/jvbe.2000.1757)
- Seibert, S.E., Kraimer, M.L. & Crant, J.M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54, 845–874. [doi.org/10.1111/j.1744-6570.2001.tb00234.x](https://doi.org/10.1111/j.1744-6570.2001.tb00234.x)
- Sharma, P.K., & Kumra, R. (2022). Relationship between mindfulness, depression, anxiety and stress: Mediating role of self-efficacy. *Personality and Individual Differences*, 186(111363), 1-6. [doi.org/10.1016/j.paid.2021.111363](https://doi.org/10.1016/j.paid.2021.111363)
- Soysa, C.K. & Wilcomb, C.J. (2015). Mindfulness, self-compassion, self-efficacy, and gender as predictors of depression, anxiety, stress, and well-being. *Mindfulness*, 6(2), 217-226. [doi.org/10.1007/s12671-013-0247-1](https://doi.org/10.1007/s12671-013-0247-1)
- Tabatabaei, S., Jashani, N., Mataji, M., & Afsar, N.A. (2013). Enhancing staff health and job performance through emotional intelligence and self-efficacy. *Procedia-Social and Behavioral Sciences*, 84, 1666-1672. [10.1016/j.sbspro.2013.07.011](https://doi.org/10.1016/j.sbspro.2013.07.011)
- Tan, J., Yang, W., Ma, H. & Yu, Y. (2016). Adolescents' core self-evaluations as mediators of the effect of mindfulness on life satisfaction. *Social Behavior and Personality: an international journal*, 44(7), 1115-1122. [doi.org/10.2224/sbp.2016.44.7.1115](https://doi.org/10.2224/sbp.2016.44.7.1115)
- Ünüvar, T.H. (2006). *An integrative model of job characteristics, job satisfaction, organizational commitment and organizational citizenship behavior*. Unpublished Doctoral Dissertation. Middle East Technical University, Ankara, Turkey.
- Voydanoff, P. (2005). Toward a conceptualization of perceived work-family fit and balance: a demands and resources approach. *Journal of Marriage and Family*, 67(4), 822-836. [doi.org/10.1111/j.1741-3737.2005.00178.x](https://doi.org/10.1111/j.1741-3737.2005.00178.x)
- Weare, K. (2019). Mindfulness and contemplative approaches in education. *Current Opinion in Psychology*, 28, 321-326. [doi.org/10.1016/j.copsyc.2019.06.001](https://doi.org/10.1016/j.copsyc.2019.06.001)
- Yeşilay, A., Schwarzer, R. & Jerusalem M. (1996). *Genelleştirilmiş Öz Yetki Beklentisi*. Retrieved from <http://userpage.fu-berlin.de/~health/turk.htm>
- You, S., & Yoo, J. (2021). Relations among socially prescribed perfectionism, career stress, mental health, and mindfulness in Korean college students. *International Journal of Environmental Research and Public Health*, 18(22), 1-8. [doi.org/10.3390/ijerph182212248](https://doi.org/10.3390/ijerph182212248)
- Zeidan F, Johnson S.K, Diamond B.J., David Z. & Goolkasian P. (2010). Mindfulness meditation improves cognitive functioning: Evidence of brief mental training. *Consciousness and Cognition* 19(2), 597–605. [doi.org/10.1016/j.concog.2010.03.014](https://doi.org/10.1016/j.concog.2010.03.014)
- Zivnуска, S., Kacmar, K.M., Ferguson, M. & Carlson, D.S. (2016). Mindfulness at work: Resource accumulation, well-being, and attitudes. *Career Development International*, 21(2), 106-124. [doi.org/10.1108/CDI-06-2015-0086](https://doi.org/10.1108/CDI-06-2015-0086)