

Determining The Intermediate Role of Psychological Well-Being and Staff Empowerment in The Relationship Between Management Support and Employee Performance¹

Ergün KARA (<https://orcid.org/0000-0002-7815-1111>), *Osmaniye Korkut Ata University, Türkiye;*
ergunkara@osmaniye.edu.tr

Makbule Hürmet ÇETİNEL (<https://orcid.org/0000-0003-3260-7432>), *Uşak University, Türkiye;*
hurmet.cetinel@usak.edu.tr

Yönetici Desteği ile Çalışan Performansı Arasındaki İlişkide Psikolojik İyi Oluş ve Personel Güçlendirmenin Aracı Etkisinin Belirlenmesi²

Abstract

This research aims to measure the mediation and serial mediation effect of psychological well-being and personnel empowerment in the relationship between manager support and employee performance. To realise this aim, research was carried out in the textile sector operating in the province of Uşak. As a result of the study, it was concluded that psychological well-being has a mediating effect on the effect of managerial support on employee performance, but personnel empowerment has no mediating effect. In addition, it was concluded that both psychological well-being and personnel empowerment had a serial mediation effect on employee performance.

Keywords : Managerial Support, Performance, Psychological Well-Being, Staff Empowerment.

JEL Classification Codes : M10, M19.

Öz

Bu araştırmanın amacı yönetici desteği ile çalışan performansı arasındaki ilişkide psikolojik iyi oluş ve personel güçlendiriminin aracılık ve seri aracılık etkisini ölçmektir. Bu amaç doğrultusunda Uşak ilinde faaliyet gösteren ve tekstil sektöründe araştırma yapılmıştır. Araştırma sonucunda; yönetici desteğinin çalışan performansına etkisinde psikolojik iyi oluşun aracılık etkisi olduğuna ancak personel güçlendiriminin ise aracılık etkisi olmadığı sonucuna ulaşılmıştır. Ayrıca hem psikolojik iyi oluş hem de personel güçlendiriminin çalışan performansı üzerinde birlikte seri aracılık etkisi olduğu sonucuna varılmıştır.

Anahtar Sözcükler : Yönetici Desteği, Performans, Psikolojik İyi Oluş, Personel Güçlendirme.

¹ A part of this study was presented at the National Management and Organization Congress held at Süleyman Demirel University on May 26-28, 2022.

² Bu çalışmanın bir kısmı Süleyman Demirel Üniversitesi'nde 26-28 Mayıs 2022 tarihleri arasında düzenlenen 30. Ulusal Yönetim ve Organizasyon Kongresinde sözlü bildiri olarak sunulmuştur.

1. Introduction

In our contemporary business world with great globalisation and relentless competition, employees are undoubtedly considered one of the leading factors adequate for organisational success. Especially when this is approached by businesses operating across the Organized Industrial Zones (OIZ), productivity, service quality and customer satisfaction depend mainly on employees in the respective operations. Therefore, businesses across the OIZs must investigate and study human factors with their multiple dimensions for higher success. An atmosphere that could be created with minimum stress levels for employees at these organisations in which their psychological comfort and management support are provided would eventually enhance their performance level (Aşık, 2020: 736; Hefferon & Boniwell, 2014: 77; Wright, 2010: 14).

Some factors influence employees' performances in their business lives. Particularly researchers in organisational behaviour report that managerial support, psychological well-being and employee empowerment are some of the substantial factors effective on employee performance. Because the survival of an organisation and its superiority over its competitors in the sector depends on these factors, managerial support positively affects both organisational and individual levels in light of the relevant literature. It could be noted that managerial support is related to some aspects such as organisational loyalty, job satisfaction, performance, presentism, organisational justice, stress management, employee empowerment, psychological well-being, training, the intention of leaving a job, leadership, and organisational support (Helvacı, 2002: 156).

When the volume of the research on the correlation between managerial support and employee performance is considered, the quantity and scope of the studies on the organised industrial zone need to be increased. Thus, the present study aims to determine the mediatory and serial mediatory roles of psychological well-being and employee empowerment on managerial support and employee performance within the scope of the employees of OIZ in Uşak City. It aimed to contribute to the current literature based on managerial support, employee performance, psychological well-being and empowerment variables. Manager support's direct and indirect effects on employee performance can be analysed. In this respect, mediation and serial mediation effect analyses were sought to specify the indirect impact of manager support on employee performance. Moreover, our purpose was to inform readers about the effective factors in the relationship between managerial support and employee performance across OIZs and to encourage decision-makers to take stronger actions to enhance the psychological well-being of their employees within the scope of the questions mentioned below. In this context, managers and employees must adopt the philosophy of managerial support; a management understanding encouraging psychological well-being and employee empowerment needs to be promoted for organisations (Hochwarter et al., 2006: 482; Skerlavaj et al., 2014: 1).

The key orientation points of our study are the positive effect of managerial support, psychological well-being and employee empowerment on employee performance and

whether psychological well-being, employee empowerment and managerial support have enhancing impact on employee performance. Even though various researchers have investigated the effect of managerial support on employee performance in the current literature, the respective roles of psychological well-being and employee empowerment in this effect have yet to be addressed, reflecting the present study's significance. Our study made a specific contribution to the available literature in this sense.

The following questions were addressed in the scope of our study:

- *Does managerial support affect employee performance?*
- *Does managerial support affect psychological well-being and employee empowerment?*
- *Does psychological well-being affect employee empowerment and employee performance?*
- *Does employee empowerment affect employee performance?*
- *Do psychological well-being and employee empowerment have mediatory and serial mediatory roles in the correlation between managerial support and employee performance?*

At first, managerial support, employee performance, psychological well-being and employee empowerment subjects were reviewed through the concerned literature. This was followed by the development of the study hypotheses based on the outcomes of the literature review. Then, the framework of our study and utilised analysis method was introduced in the next chapter.

2. Literature Review and Hypotheses

2.1. Managerial Support

Managerial support is the extent of support, respect and encouragement that managers have for their subordinate employees (Eisenberger et al., 2002: 566). In other words, perceived managerial support refers to the extent of the respect felt by employees for their seniors and their beliefs regarding their contribution to the work outcomes. Managerial support is found to be effective in the establishment of high-quality relationships and communication between manager and employee; thus, it is relatively effective on employees' work results (Golden & Veiga, 2008: 79). In another study, managerial support is described as an appreciation of opinions and projects of employees by their managers and to enhance their welfare (Kottke & Sharafinski, 1988: 1075). Managers influence the sentimental reactions of employees. The manager establishes good employee communication and coordination (Durham et al., 1997: 206). Managerial support has an important place in the generation of creative opinions. Perceived managerial support refers to the manager providing opportunities to employees to access adequate resources and practice their opinions (Skerlavaj et al., 2014: 1). Managerial support establishes cooperation among employees to reach their goals and enhance organisational performance (Hochwarter

et al., 2006: 482). It is known that the guidance, assistance and feedback from their managers help employees deal with complex situations occurring in the workplace and thus reduce occupational stress, which can influence employees' psychological well-being, work-family conflict and job satisfaction (Yoon & Lim, 1999).

2.2. Employee Performance

Employee performance refers to a good, service or opinion created by an employee by prescribed instructions to accomplish the mission, objective or targets. Performance could be described as an employee's output from the job (Helvacı, 2002: 156). Performance is an interaction between employees and organisational targets. Employees are the most substantial resources for businesses to attain their aims and targets. As employees sustain their efficient performance, their workplace can accomplish objectives and targets. Employee performance is a critical factor for organisational success. Therefore, a manager strives to increase the performance level of the employees (Çalık, 2003: 8). Employee performance is seen as the effort and exertion that individuals working in the organisation must show for the organisation in exchange for their salary or an economical price (Rousseau & McLean, 1993). In terms of businesses, the concept of performance is expressed as services, goods or ideas that are propounded to fulfil in the best way the task to be done within the framework of previously defined criteria and to achieve the goals determined by the business (Pugh, 1991: 7-8).

2.3. Psychological Well-Being

Psychological well-being refers to an individual's overall experiences in response to their positive reactions (Diener, 1994: 108). Psychological well-being advocates that the capacity to realise an individual's potential lies under the foundation of well-being. Psychological well-being includes more than satisfaction and fulfilment for happiness and good life (Hefferon & Boniwell, 2014: 77). Psychological well-being consists of an individual's holistic consideration of his/herself, past, self-development capacity, the significance of life and purpose, grasping of the external world, and internal independency upon recognition of their potential (Ryff & Keyes, 1995: 1007). Psychological well-being is subjective and an individual experience. Psychological well-being contains both relative existences of positive affection and the relative inexistence of negative affect. Complementary concepts such as happiness, cherish, and hedonic happiness is regarded as high and positive aspects of psychological well-being (Wright, 2010: 14). When human life is considered and evaluated, it is likely to compare the perceived state with its standards of desirability. This is the subjective element of cognitive assessment. Psychological well-being incorporates various concepts, from everyday life experiences to much broader global judgments about lives (Kim-Prieto et al., 2005).

2.4. Employee Empowerment

Employee empowerment is considered a crucial concept developed to ensure employees gain the initiative in the decisions concerning their tasks, create a solution without interference from senior management when they encounter issues, and contribute to the work process at the highest possible level (Oktuğ, 2017: 247). Employee empowerment is an approach to use better judgment and increase individual authority within an organisation for better utilisation of current opportunities. Thus, it aims to increase organisational motivation as well (Kappelman & Richards, 1996: 26). Spreitzer considers empowerment as a motivational structure with four perception dimensions: content, competency, autonomy and impact (Spreitzer, 1995: reported by Çöl, 2008: 37). Additionally, Koçer says that employee empowerment is an atmosphere in which employees feel motivated, having self-confidence in terms of knowledge and competency, and spending effort to accomplish organisational objectives through taking individual initiative (Koçel, 2005: 416). Employee empowerment refers to sharing information about the performance of the organisation and the personnel at the low level of the organisational hierarchy in authorising employees, rewarding them according to their performance, and authorising them in decision-making. Personnel empowerment is very significant as it represents a management approach. It has been stated that personnel empowerment is associated with organisational commitment (Sağlam-Arı & Ergeneli, 2003).

2.5. The Relationship between Managerial Support and Employee Performance

Since manager support is an important concept that makes the employees feel appreciated and preferred by the manager when they perceive this support more strongly, their organisational commitment and psychological well-being levels are positively affected. The manager is devoted to the well-being of employees. This situation is also substantial for organisational efficiency (Kwenin et al., 2013). The current literature on the correlation between managerial support and employee performance reveals findings supporting the objective of the present study. For instance, Shanock and Eisenberger (2006) report that perceived organisational support and managerial support perceived by subordinates positively affect supra-role performance. Tarcan et al. (2021) reveal that perceived managerial support significantly affects performance. It is addressed that solid support from managers to employees positively affects their performance levels. Zaman et al. (2019) suggest that employee loyalty plays a mediatory role concerning the effect of perceived organisational support and managerial support on employees' in-role and supra-role performance. Guchait et al. (2014) reveal that perceived manager and co-worker support directly affects employee loyalty and performance. Dysvik and Kuvaas (2012) report that perceived managerial support positively correlates with employee development atmosphere and business performance. Pazy & Ganzach (2009) report a significant positive correlation between managerial support and job performance. Emhan et al. (2013) address that employee performance increases when managerial support is high. Similarly, Arslan (2019) reports a positive correlation between managerial support and organisational performance.

Sekhar & Patwardhan (2021) emphasise the effect of managerial support on the impact of flexible work adjustments on job performance. Additionally, researchers report that employees feel more valuable to the organisation when they take managerial support, affecting their job performance. Van & Kroon (2020) reveal that performance evaluations based on strong dimensions in conventional process analysis positively affect managerial support. Our hypothesis concerning the effect of managerial support on employee performance was developed based on previous studies as below:

H₁: Managerial support has a positive impact on employee performance.

2.6. The Relationship between Managerial Support and Psychological Well-Being & Employee Empowerment

The relationship between managerial support at the workplace and psychological well-being could also be explained by "Affective Events Theory", the most frequently used hypothetic framework to interpret the psychological well-being process (Weis & Cropanzola, 1996). Because interpersonal maltreatment is a negative event, it contributes to individuals reacting negatively emotionally to such a situation and deteriorates their psychological health (Anwar & Sidin, 2016). Gilbreath & Benson (2004) state that manager behaviour and support positively contribute to employees' psychological well-being. Moreover, researchers report that managers who pursue creating a better workplace environment must not ignore their employees. Nabawanuka & Ekmekcioglu (2022) says that managerial support positively affects the balance between psychological well-being and work/life. Employee empowerment ensures organisations gain a democratic governance understanding in which employees can participate in decision-making and freely express their opinions (Abraiz et al., 2012: 393). Similarly, Ceylan et al. (2015) report a positive correlation between managerial support, job satisfaction and employee empowerment. Current studies in the literature (Achour et al., 2017; McIlroy, 2021; Gilbreath & Benson, 2004; Sommovigo et al., 2019; Nabawanuka & Ekmekcioglu, 2022) address the existence of a positive correlation between managerial support and psychological well-being; (Nisula, 2015; Jose & Mampilly, 2015; Özbozkurt et al., 2021; Ceylan et al., 2015; Abraiz et al., 2012) between managerial support and employee empowerment. In emotional Events Theory", different events (positive or negative) experienced by individuals in the past induce some emotional reactions in today's business life. On the other hand, in "Individual-Organisation Harmony Theory", individuals and organisations, consciously or unconsciously, take care to choose a workplace or person that will ensure this harmony. Because in such a case, the needs will be mutually satisfied more easily (Kristof-Brown et al., 2005). Based on studies on "Affective Events Theory" and "Individual-Organisation Harmony Theory", hypotheses were developed for the relationship between managerial support and psychological well-being & employee empowerment as below:

H₂: Managerial support has a positive effect on psychological well-being.

H₃: Managerial support has a positive effect on employee empowerment.

2.7. The Relationship between Psychological Well-Being and Employee Empowerment & Employee Performance

Psychological well-being reveals the necessity of achieving both employee and organisational performance; in this regard, this relationship among variables is significant (DiMaria et al., 2020). In this context, it should be determined how an employee's well-being and well-being affect his performance at work (Salgado et al., 2019). Li & Lin (2021) suggest that well-designed human resources practices increase employees' well-being levels; and that there is a significant positive effect between employee empowerment and well-being. Rahi (2021) reports that psychological well-being is related to employee empowerment, transformational leadership, job enrichment and loyalty. Current literature also studies the relationship between psychological well-being and employee performance. For instance, Holman et al. (2002) report a positive relationship between psychological well-being and performance. Biswas (2011) indicates that psychological well-being is effective on job performance. Kundi et al. (2021) report a relationship between psychological well-being and employee performance; affectionate loyalty has a mediatory role. Current studies (Garcia & Bonavia, 2021; Li & Lin, 2021; Rahi, 2021; El-Kot, 2019) indicate a positive correlation between psychological well-being and employee empowerment; (Abualoush et al., 2018; Yang & Choi, 2009; Baird et al., 2018; Kılınç, 2020; Jha, 2019; Wright & Cropanzao, 2004) indicate the positive correlation between psychological well-being and employee performance. Accordingly, based on these findings, our hypothesis concerning the correlation between psychological well-being and, employee empowerment & employee performance was developed as below:

H4: Psychological well-being has a positive effect on employee empowerment.

H5: Psychological well-being has a positive effect on employee performance.

2.8. The Relationship between Employee Empowerment and Employee Performance

Baird et al. (2018) claim that employee empowerment has both direct and indirect effects on organisational performance. Yang & Choi (2009) report a positive relationship between empowerment and job performance and that job motivation has a partial mediatory role in this relationship. Kılınç (2020) emphasises a medium-level positive relationship between employee empowerment and perceived performance. Jha (2019) remarks that a high psychological empowerment level significantly affects psychological security, learning motivation, and team performance. Abualoush et al. (2018) state that information management and information systems positively affect employee empowerment and performance. Thus, our hypothesis concerning the relationship between employee empowerment and employee performance was developed as below:

H6: Employee empowerment has a positive effect on employee performance.

2.9. Mediatory and Serial Mediatory Relationships of Psychological Well-Being and Employee Empowerment Variables

According to our literature review, no study investigated the mediatory and serial mediatory roles of psychological well-being and employee empowerment variables in terms of the effect of managerial support on employee performance. However, our study aimed to investigate the direct impact of managerial support on employee performance and the indirect effect through psychological well-being and employee empowerment. The conceptual framework drawn above and studies in the literature reveal the direct relationships between the variables. From direct relationships between variables, it was considered that psychological well-being and employee empowerment could indirectly affect the relationship between managerial support and employee performance. Accordingly, the following hypotheses were developed (see: Figure 1):

H₇: Psychological well-being has a mediatory effect on the relationship between managerial support and employee performance.

H₈: Employee empowerment has a mediatory effect on the relationship between managerial support and employee performance.

H₉: Psychological well-being and employee empowerment have serial mediatory effects on the relationship between managerial support and employee performance.

3. Research Methodology

This section introduces the purpose of our study, sampling and research methods, data collection tools and data analysis methods.

3.1. Purpose and Scope of the Study

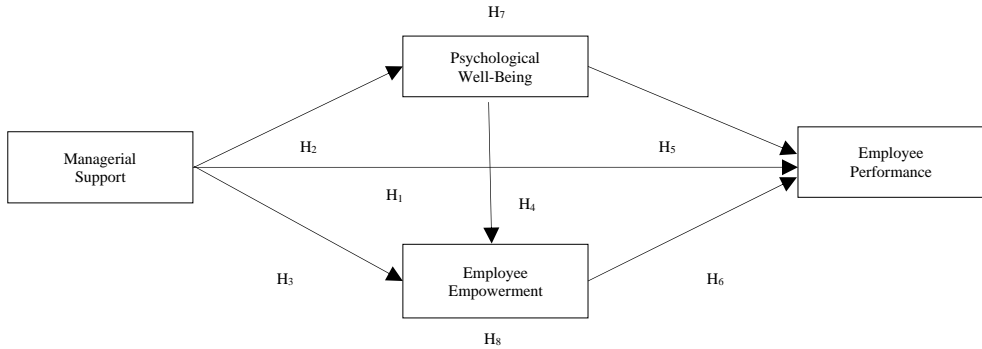
Our study investigated the mediatory effect of psychological well-being and employee empowerment variables in the relationship between managerial support and employee performance. At first, the structural validity of variables included in the study was ensured; the correlation level among hidden variables was measured; confirmatory factor analysis was conducted to obtain a structural equation model to determine whether there is a mediatory role of psychological well-being and employee empowerment on the relationship between managerial support and employee performance.

3.2. Research Model

The literature review on the concerned subject suggests that managerial support correlates significantly with psychological well-being, employee empowerment and performance. Moreover, several studies are oriented on the relationship between psychological well-being, employee empowerment and employee performance. However, the literature was found quite scarce about the effect of mediatory and serial mediatory roles of psychological well-being and employee empowerment on the relationship between managerial support and employee performance, enhancing our study's significance for the

current literature. The authors created the model of this research based on the literature. Figure 1 exhibits the conceptual model of four different variables.

Figure: 1
Research Model



3.3. Universe and Sampling of the Study

The study universe consisted of employees working across the businesses in the manufacturing industry of the Uşak City Organized Industrial Zone (OIZ). Due to limitations introduced by cost, time and pandemic restrictions, the whole universe was not accessible for the study. Accordingly, the study sampling included 524 employees who volunteered for a face-to-face interview for our research. The survey method was conducted to collect data for the objectives of our study. The convenience sampling method was preferred. The number of minimum surveys that need to be undertaken for the study was estimated using Equation 1.

$$n = \frac{NPQZ^2}{(N-1)d^2 + PQZ^2} \quad (1)$$

where, n refers sampling size, N refers size of universe, P refers probability of occurrence of given incident; $Q = 1 - P$, Z value $(1 - \alpha)$ refers test statistics at the confidence level; d refers tolerance. When confidence level and tolerance level were taken 95% and 5%, minimum sampling size to represent the universe was estimated at 384 as a result of the following calculation (Özer, 2004; Yakut, 2020):

$$n = \frac{264373(0.5)(0.5)(1.96)^2}{(264373 - 1)0.05^2 + (0.5)(0.5)(1.96)^2} \cong 384$$

Based on demographical characteristics and descriptive statistics about the sampling group, our results were summarised as follows.

Table: 1
Distribution of Demographic Data

		Frequency
Gender	Male	250
	Female	274
Age	18-24 Age	16
	25-31 Age	74
	32-38 Age	144
	39-44 Age	192
	45-51 Age	76
	52-58 Age	20
	59 and older Age	2
Marital Status	Married	384
	Single	140
Education Statuses	Primary school	172
	Secondary school	170
	High school	48
	University	30
Job Positions	Regular staff	202
	Chief	20
	Medium level manager	20
	High-level manager	4
	Other	278

3.4. Research Scale

The survey form includes demographical questions to gather information about employees, such as gender, age, marital status, education level and rank at the workplace, and items concerning managerial support, psychological well-being, employee empowerment, and employee performance. The survey form was structured on a 5-point Likert Scale.

Managerial Support Scale: Our study scale included seven items determined after conducting reliability and validity analyses based on the scale created by Eisenberg et al. (1986: 500-607) in 1986 and adapted afterwards by Göktepe (2017: 31-48). The reliability coefficient of the scale was found to be 0.91. Confirmatory factor analysis (CFA) results are as follows: $\chi^2=11.158$, $df=7$, $CMIN/DF=1,59$, $SRMR=.028$, $IFI=.995$, $CFI=.995$, $RMSE=.048$.

Psychological Well-Being Scale: "Psychological Well-being" scale consisted of 8 items developed for complimentary well-being measurements and to perform socio-psychological well-being by Diener et al. (2010) was employed in our analysis. The adaptation study of the scale to Turkish was carried out by Akın (2008). The reliability coefficient of the scale was determined as 0.90. Confirmatory factor analysis (CFA) results are as follows: $\chi^2=47.362$, $df=18$, $CMIN/DF=2.631$, $SRMR=.41$, $IFI=.976$, $CFI=.975$, $RMSE=.079$.

Employee Empowerment: Employees' empowerment perceptions were measured by Spreitzer's (1995) Likert-type 12-item scale consisting of four dimensions: significance, competency, autonomy and impact. The Turkish scale validation was carried out by (Özer et al., 2015: 106; Tunay, 2019: 244). The reliability coefficient of the scale was found to be 0.90. $\chi^2=9.359$, $df=6$, $CMIN/DF=1.560$, $SRMR=.008$, $IFI=.998$, $CFI=.998$, $RMSE=.046$.

Employee Performance: The scale consisted of a single dimension and four items taken from the study of Kirkman and Rosen (1999) and developed by Sigler and Pearson (2000) was utilised. The scale was adapted into Turkish by Çöl (2008). The reliability coefficient of the scale was determined as 0.89. $\chi^2=.424$, $df=1$, $CMIN/DF=.424$, $SRMR=.003$, $IFI=.999$, $CFI=.999$, $RMSE=.000$.

4. Findings and Discussions

SPSS and AMOS statistical package software were utilised to analyse the collected data. At the first stage of the data analysis, average, standard deviation, and skewness-kurtosis coefficients of scales were taken into consideration; and correlation levels among variables were investigated to determine the direction and significance of relationships. Moreover, reliability analysis and confirmatory factor analysis (DFA) was conducted in our study. The structural equation model (SEM) was also preferred to test the study hypotheses. Hence, it was aimed to investigate direct, indirect and overall effects among variables concerned in our study.

Table: 2
Descriptive Statistics and Correlation Coefficients

	Ave.	Sd.	Skewness	Kurtosis	1	2	3	4
1. Managerial Support	3.59	.98	-.602	-.94	(.91)			
2. Employee Performance	4.25	.81	-1.769	.30	.542**	(.90)		
3. Psychological Well-Being	3.94	.83	-1.061	1.09	.427**	.645**	(.90)	
4. Employee Empowerment	3.97	.72	-1.017	1.26	.501**	.632**	.671**	(.89)

** $p < .001$, $n=524$, Cronbach's Alpha values in parentheses.

Table 2 exhibits correlation levels among variables and reliability and descriptive statistics variables. Table 2 shows positive and significant correlations among managerial support, employee performance, psychological well-being and empowerment. As a result of the analyses conducted to test the reliabilities included in the study, values for managerial support, employee performance, psychological well-being and employee empowerment were estimated as .91, .90, .90 and .89, respectively (see: Table 2), which were found to be higher than .70, a threshold value recognised generally by the literature (Hair et al., 2010: 25). Average skewness and kurtosis values of variables were found in the range of +2 and -2, which suggested regular distribution of data.

Table: 3
The Goodness of Fit Statistics of Scales and Research Model

	χ^2	df	CMIN/DF	SRMR	IFI	CFI	TLI	RMSEA
Managerial support	11.158	7	1.59	.028	.995	.995	.990	.048
Employee performance	.424	1	.424	.003	.999	.999	.999	.000
Psychological Well-Being	47.362	18	2.631	.041	.976	.975	.962	.079
Employee Empowerment	9.359	6	1.560	.008	.998	.998	.994	.046
Measurement Model	725.81	312	2.326	.073	.922	.922	.912	.071

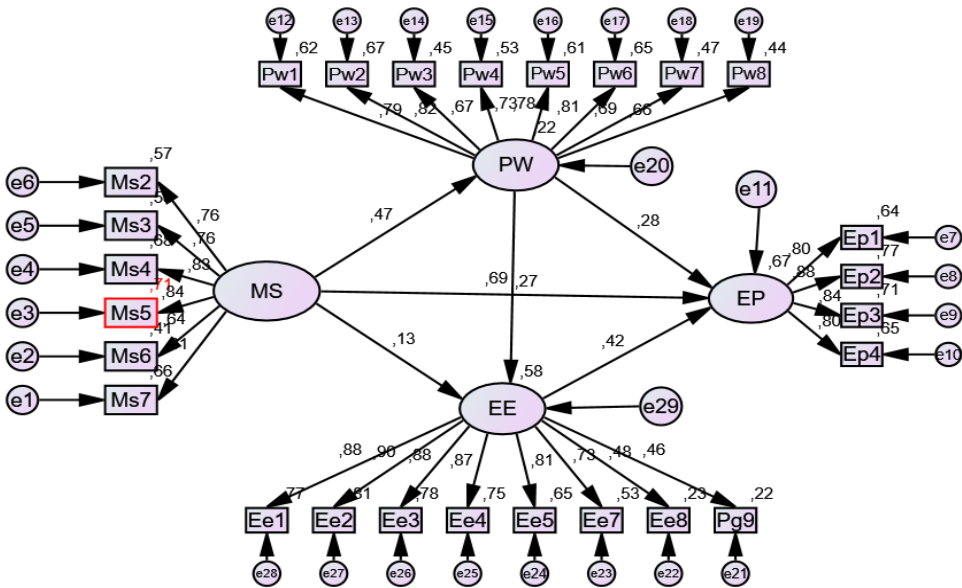
χ^2 =fitness between data and suggested model; df =degree of freedom; χ^2/df =ratio of chi-square statistic to the degree of freedom; $SRMR$ =surplus covariance; IFI =augmented fit index; CFI =comparative fit index; TLI =Tucker-Lewis index; $RMSEA$ =root mean square error average.

At first, the validity of scales was tested for multifactorial structure by conducting the confirmatory factor analysis (DFA) through the AMOS software. Due to the standard

data distribution, the maximum likelihood estimation method was performed (Gürbüz & Şahin, 2016; Kara & Kaya, 2020). Table 3 shows the confirmatory factor analysis (CFA) results. As reported by the researchers, based on acceptable value ranges, χ^2/df needed to be less than 3; IFI, CFI and TLI values required to be greater than 0.90; and SRMR and RMSEA values needed to be less than 0.08 (Gürbüz & Şahin 2018: 345). As a result of the confirmatory factor analysis showed that goodness of fit indexes of scales accommodates their threshold levels (Browne & Cudeck, 1992; MacCallum, Browne & Sugawara, 1996). Accordingly, it was concluded that the structural validity of the scales was confirmed, and they were in harmony with the suggestions reported by Turkish adaptation studies. Moreover, these results confirmed the four-factor study's hypothetical structure.

In the next chapter, a path analysis model was structured to test the research hypotheses to investigate the mediatory role of psychological well-being and employee empowerment on the relationship between managerial support and employee performance. Figure 2 illustrates the established structural equation model.

Figure: 2
Structural Equation Model (SEM) and Standardized Path Coefficients



Regarding the model exhibited in Figure 2, H₁, H₂, H₃ and H₄, H₅, H₆, H₇, H₈, H₉: the hypothesis of “Psychological well-being and employee empowerment have a serial mediatory effect on the relationship between managerial support and employee performance” were structured to test the effect of the mediatory model by the structural

equation model (SEM). In our study, the Monte Carlo parametric bootstrap option (Hayes & Scharkow, 2013) and the highest possibility method were conducted to test the mediatory role and check the significance of indirect effects for the 5,000 sampling group at a 95% confidence interval. Table 4 exhibits the coefficients of the research model.

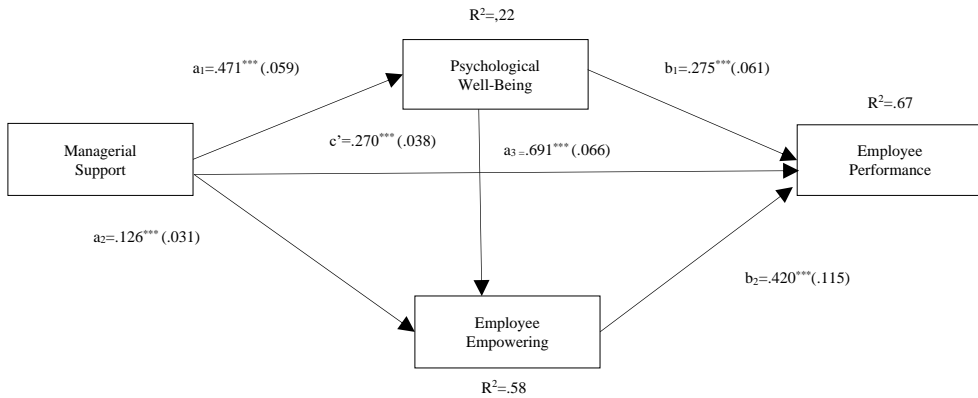
Table: 4
Effect of Covariance-based Structural Equation Model (SEM) Variables

	Direct Effect	Indirect Effect	Overall Effect	VAF Value	Mediatory Effects	Hypotheses
MS → EP	0.270 ***(.038)		0.597			H ₁ supported
MS → PW	0.471 ***(.059)					H ₂ supported
MS → EE	0.126* (.031)		0.451			H ₃ supported
PW → EE	0.691 ***(.066)					H ₄ supported
PW → EP	0.275 ***(.061)		0.565			H ₅ supported
EE → EP	0.420 ***(.115)					H ₆ supported
MS →PW → EP		0.136*		0.23	Partial mediatory	H ₇ supported
MS → EE →EP		0.0546		0.09	No mediatory	H ₈ not supported
MS→PW → EE →EP		0.1362*		0.23	Partial serial mediatory	H ₉ supported

Not: n=524 (5.000 Bootstrap sample), MS %95 BC=Bias corrected %95 Confidence interval, p<0.05, p<0.01**, p<0.001***. Standard errors in parentheses. MS: Managerial support, PW: Psychological Well-being, EE: Employee Empowerment, EP: Employee Performance.*

Our study hypothesis was tested based on the structural model. Table 4 summarises our findings on the direct, indirect, and overall effects of latent variables. When established hypotheses were considered in this regard, it was concluded to support the H₁ hypothesis stating the impact of managerial support on employee performance ($\beta = 0.27$; $p < 0.001$). This finding suggested that managerial support has an increasing effect on employee performance. It was also seen that the H₂ hypothesis indicating the impact of managerial support on psychological well-being ($\beta = 0.471$; $p < 0.001$) was supported. H₃ hypothesis explaining the effect of managerial support on employee empowerment ($\beta = 0.126$; $p < 0.05$) was supported. H₄ hypothesis indicating the effect of psychological well-being on employee empowerment ($\beta = 0.691$; $p < 0.001$) was supported. H₅ hypothesis indicating the effect of psychological well-being on employee performance ($\beta = 0.275$; $p < 0.001$) was supported. H₆ hypothesis indicating the impact of employee empowerment on employee performance ($\beta = 0.42$; $p < 0.001$) was supported. According to Zhao et al. (2010) and Baron and Kenny (1986), VAF (variance accounted for) value needs to be estimated to evaluate the existence of a mediatory effect. The researchers suggest that there is no mediatory effect if the VAF value is less than 0.20; there is a partial mediatory effect if the VAF value is in the range of 0.20 and 0.80; and mediatory effect if the VAF value is equal to or greater than 0.80. Therefore, when mediatory effects were investigated for our hypotheses, the H₇ hypothesis indicating the mediatory effect of psychological well-being on the managerial support's effect on employee performance ($\beta = 0.136$; $p < 0.001$; $VAF: 0.23$) supported. H₈ hypothesis indicating the mediatory effect of employee empowerment on managerial support's impact on employee performance was not supported because the indirect effect was not significant ($\beta = 0.0546$; $p < 0.001$; $VAF: 0.09$). H₉ hypothesis indicating the serial mediatory effect of psychological well-being and employee empowerment on managerial support's effect on employee performance ($\beta = 0.1362$; $p < 0.001$; $VAF: 0.23$) was supported.

Figure: 4
Coefficients, Standard Errors, and Reported Variance Values of the Model



5. Results and Suggestions

The current literature concerning the potential effects of influence on employee performance is extensive. Personal or organisational factors could be effective in increasing employee performance. Within the scope of this study, managerial support, psychological well-being and employee empowerment variables effective on employee performance were investigated. In other words, serial mediatory analysis rarely applied method in the literature, was employed in our study to investigate the roles of two different mediatory between independent and dependent variables (Tilki et al., 2021). According to our results, psychological well-being and employee empowerment variables undertook a mediatory role in the relationship between managerial support and employee performance.

The results of our analyses on hypotheses were compared with the findings reported in the relevant literature to assess whether our findings are in line with the current literature. Our findings suggested that managerial support significantly positively affected employee performance. Accordingly, employees feeling managerial support increased their performance levels. This result was found to be accommodating with the results of the studies conducted to investigate the effect of managerial support on employee performance (Shanock & Eisenberger, 2006; Tarcan et al., 2021; Zaman et al., 2019; Guchait et al., 2014; Dysvik & Kuvaas, 2012; Ganzach, 2009; Emhan et al., 2013; Sekhar & Patwardhan, 2021; Van & Kroon, 2020).

According to our study results, it was determined that managerial support has a positive and significant effect on psychological well-being and employee empowerment levels. Hence, psychological well-being and employee empowerment levels of employees supported by their managers increase. This result was found to be supported by the results of previous studies investigating the relationship between managerial support-psychological

well-being (Gilbreath & Benson, 2004; Nabawanuka & Ekmekcioglu, 2022; Achour et al., 2017; McIlroy, 2021; Sommovigo et al., 2019) as well as the relationship between managerial support-employee empowerment (Nisula, 2015; Jose & Mampilly, 2015; Özbozkurt et al., 2021; Ceylan et al., 2015; Abraiz et al., 2012).

Additionally, it was determined that psychological well-being positively and significantly affects employee empowerment. This result coincided with other studies suggesting the positive effect of psychological well-being on employee empowerment (Garcia & Bonavia, 2021; Li & Lin, 2021; Rahi, 2021; El-Kot, 2019). Our analysis indicated that psychological well-being positively and significantly affects employee performance. This finding corresponds to other studies reporting the positive effect of psychological well-being on employee performance (Abualoush et al., 2018; Yang & Choi, 2009; Baird et al., 2018; Kılınç, 2020; Jha, 2019; Wright & Cropanzao, 2004). Another conclusion of our study was that employee empowerment significantly and positively affects employee performance. Similarly, this finding is supported by the studies addressing the positive effect of employee empowerment on employee performance (Baird et al., 2018; Yang & Choi, 2009; Kılınç, 2020; Jha, 2019; Abualoush et al., 2018).

Considering indirect effects explained by the structural equation model, it was concluded that psychological well-being has a mediatory impact on the relationship between managerial support and employee performance, but employee empowerment has no mediatory effect. Furthermore, as a result of the analysis concerning the core objective of this study, it was determined that both the psychological well-being and employee empowerment variables have serial mediatory effects on employee performance. In the current literature, no other analysis was encountered considering mediatory and serial mediatory effects of psychological well-being and employee empowerment on the impact of managerial support on employee performance.

From the practical perspective, our findings were useful for senior and human resources managers. The primary output businesses expect from their employees is high performance. In this sense, our conclusion was support, and a positive approach of managers toward their employees could be regarded as the most fundamental factor ensuring organisations accomplish their objectives. As our study laid it down, managerial support, psychological well-being, and employee empowerment variables significantly estimated employee performance. Moreover, a positive correlation was determined for all of the concerned variables. If employees have high perception levels with these characteristics, their behavioural consequences could be accommodating the expectations of their workplace or organisation. Additionally, employee performance could increase because employees supported by their managers could develop their organisational skills over time. Their psychological well-being could be maintained through quality interpersonal relationships using organisational resources.

Our study, which tried to explore the direct, indirect and mediatory relationships among managerial support, psychological well-being, employee empowerment and

employee performance, displayed some limitations. One of these was that study data was collected within a limited time frame, whereas the other was that our analysis was based on a single sampling group. For future studies, researchers are suggested to repeat our analysis on employees from different industries by taking other variables influential on employee performance (leadership, job satisfaction, organisational silence, intention to leave a job, organisational citizenship etc.) into consideration. In light of these obtained findings, our study was expected to reveal direct, indirect and mediatory relationships among managerial support, psychological well-being, employee empowerment, and employee performance, which would contribute to the literature and managers in their business lives by providing different points of the angle.

It is observed that employment performances will augment if those who work in industrial enterprises, particularly those operating in the textile sector, are supported by consumption. Constructed results confirm this. On the other hand, it is recommended that organisations that are considered to have an important role in the advancement of a limitation in terms of good formation and personal use dimensions of organisms with average tool use of performance should provide both executive support and opportunity to be psychologically perfect.

References

- Abualoush, S.H. et al. (2018), "The Role of Employees' Empowerment as an Intermediary Variable between Knowledge Management and Information Systems on Employees' Performance", *VINE Journal of Information and Knowledge Management Systems*, 48(2), 217-237.
- Achour, M. et al. (2017), "Management and Supervisory Support as a Moderator of Work-Family Demands and Women's Well-being a Case Study of Muslim Female Academicians in Malaysia, *Humanomics*, 33(3), 335-356.
- Akın, A. (2008), "Scales of Psychological Well-Being: A Study of Validity and Reliability", *Educational Science: Theory & Practice*, 8, 721-750.
- Akşit-Aşık, N. (2020), "The Impact of the Workplace Ostracism and Organizational Cynicism on Turnover Intention: A Study in Hotel Establishment, *The Journal of International Social Research*, 13(75), 735-747.
- Anwar, F. & J.P. Sidin (2016), "Social Undermining, Stress and Well-Being: A Mediation Mechanism", *IJBEA Intl. Jrl. of Business and Economic Affairs*, 1(1), 86-92.
- Baird, K. & H. Wang (2010), "Employee Empowerment: Extent of Adoption and Influential Factors, *Personnel Review*, 39(5), 574-599.
- Baird, K. et al. (2018), "The Relationship Between The Enabling Use of Controls, Employee Empowerment, and Performance", *Personnel Review*, 47(1), 257-274.
- Baron, R.M. & D.A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations", *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Biswas, S. (2011), "Psychological Climate as an Antecedent of Job Satisfaction & Job Involvement", *Indian Journal of Industrial Relations*, 46(3), 465-477.

- Çalık, T. (2003), *Performance Management*, Gündüz Education and Publishing, Ankara.
- Ceylan, A.K. et al. (2015), "The Impact of Personnel Empowerment and Supervisor Support on Job Satisfaction: An Application in the Energy Sector", *Journal of Business Research Turk*, 7(1), 168-185.
- Chatman, J.A. (1989), "Improving Interactional Organizational Research: A Model of Person-Organization Fit", *Academy of Management Review*, 14(3), 333-349.
- Çöl, G. (2008), "The Effects of Perceived Empowerment on Employee Performance", *Journal of Dogus University*, 9(1), 35-46.
- Diener, E. (1994), "Assessing Subjective Well-being: Progress and Opportunities", *Social Indicators Research*, 31(2), 103-157.
- Diener, E. et al. (2009), "New Measures of Well-being", in: E. Diener (ed.), *Assessing Well-being: The Collected Works of Ed Diener* (247-266), Springer Science Business Media.
- DiMaria, C.H. et al. (2020), "Happiness Matters: Productivity Gains From Subjective Well-Being", *Journal of Happiness Studies*, 21(1), 139-160.
- Durham, C.C. et al. (1997), "Effects of Leader Role, Team-Set Goal Difficulty, Efficacy, and Tactics on Team Effectiveness", *Organizational Behavior and Human Decision Processes*, 72, 203-231.
- Dysvik, A. & B. Kuvaas (2012), "Perceived Supervisor Support Climate, Perceived Investment in Employee Development Climate, and Business-unit Performance", *Human Resource Management*, 51(5), 651-664.
- Eisenberg, R. et al. (1986), "Perceived Organizational Support", *Journal of Applied Psychology*, 71(3), 500-607.
- Eisenberger, R. et al. (2002), "Perceived Supervisor Support: Contributions to Perceived Organizational Support and 155 Employee Retention", *Journal of Applied Psychology*, 87(3), 565-573.
- El-Kot, G. et al. (2019), "Egyptian Women Supervisory Empowerment Behaviors on Well-being Outcomes", *Gender in Management: An International Journal*, 34(5), 350-365.
- Garcia, J.A.M. & T. Bonavia (2021), "Empowerment and Employee Well-being: A Mediation Analysis Study", *Intl. Jrl. of Environmental Research and Public Health*, 18(11), 5822.
- Gilbreath, B. & P.G. Benson (2004), "The Contribution of Supervisor Behaviour to Employee Psychological Well-being", *Work and Stress*, 18(3), 255-266.
- Göktepe, E.A. (2017), "Perceived Supervisor Support Scale; Development, Validation and Reliability", *Journal of the School of Business*, 46, 31-48.
- Golden, T. & J. Veiga (2008), "The Impact of Superior-subordinate Relationships on the Commitment, Job Satisfaction, and Performance of Virtual Workers", *The Leadership Quarterly*, 19, 77-88.
- Guchait, P. et al. (2014), "Perceived Supervisor and Co-worker Support for Error Management: Impact on Perceived Psychological Safety and Service Recovery Performance", *Intl. Jrl. of Hospitality Management*, 41, 28-37.
- Gürbüz, S. & F. Şahin (2016), *Research Methods in Social Sciences Philosophy, Method, Analysis* (3rd edition), Ankara: Seçkin Publishing.
- Gürbüz, S. & F. Şahin (2018), *Research Methods in Social Sciences Philosophy, Method, Analysis Philosophy of Science and Scientific Research Process*, Ankara: Seçkin Publishing.

- Hair, J.F. Jr. et al. (2010), *Multivariate data analysis: a global perspective*, 7th edition. New Jersey, Prentice Hall,
- Hayes, A.F. & M. Scharkow (2013), "The Relative Trust Worthiness of Inferential Tests of the Indirect Effect in Statistical Mediation Analysis: Does Method Really Matter?", *Psychological Science*, 24(10), 1918-1927.
- Hefferon, K. & I. Boniwell (2014), *Positive Psychology Theory, Research and Applications*, (Trans. T. Doğan), Ankara: Nobel Publishing.
- Helvacı, M.A. (2002), "Performans Yönetimi Sürecinde Performans Değerlendirmenin Önemi", *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 35(1-2), 155-169.
- Hochwarter, W.A. et al. (2006), "The Interaction of Social Skill and Organizational Support on Job Performance", *The Journal of Applied Psychology*, 91, 482-489.
- Holman, D. et al. (2002), "The Effects of Performance Monitoring on Emotional Labor and Psychological Wellbeing in Call Centers", *Motivation and Emotion*, 26(1), 57-81.
- Jha, S. (2019), "Team Psychological Safety and Team Performance a Moderated Mediation Analysis of Psychological Empowerment", *Intl. Jrl. of Organizational Analysis*, 27(4), 903-924.
- Jose, G. & S.R. Mampilly (2015), "Relationships Among Perceived Supervisor Support, Psychological Empowerment and Employee Engagement in Indian Workplaces", *Journal of Workplace Behavioral Health*, 30, 231-250.
- Kappelman, L.A. & T.C. Richards (1996), "Training Empowerment and Creating a Culture for Change", *Empowerment in Organizations*, 4 (3), 26-29.
- Kara, E. & A. Kaya (2020), "The Mediating Role of Psychological Adoption in the Influence of Executive's Support on Dedication to Work", *MANAS Journal of Social Studies*, 9(4), 2364-2375.
- Kılınç, E. (2020), "Analysing The Effect of Personel Empowerment in Human Resources Management on Perceived Performance", *Verimlilik Dergisi*, (4), 241-257.
- Kim-Prieto, C. et al. (2005), "Integrating the diverse definitions of happiness: A time-sequential framework of subjective well-being", *Journal of Happiness Studies*, 6(3), 261-300.
- Kirkman, B.L. & B. Rosen (1999), "Beyond Self-management: Antecedents and Consequences of Team Empowerment", *Academy of Management Journal*, 42(1), 56-74.
- Koçel, T. (2005), *Business Management*, Beta Publishing Distribution, İstanbul.
- Kottke, J.L. & C.E. Sharafinski (1988), "Measuring Perceived Supervisory and Organizational Support", *Educational and Psychological Measurement*, 48(4), 1075-1079.
- Kristof-Brown, A.L. et al. (2005), "Consequences of Individuals' Fit at Work: A Metaanalysis of Person-Job, Person-Organization, Person-Group, and Person-Supervisor Fit", *Journal of Personnel Psychology*, 58(2), 281-342.
- Kundi, Y.M. et al. (2021), "Employee Psychological Well-being and Job Performance: Exploring Mediating and Moderating Mechanisms", *Intl. Jrl. of Organizational Analysis*, 29(3), 736-754.
- Kwenin, D.O. et al. (2013), "The Influence of Employee Rewards, Human Resource Policies and Job Satisfaction on the Retention of Employees in Vodafone Ghana limited", *European Journal of Business and Management*, 5(12), 13-20.

- Kara, E. & M.H. Çetinel (2023), "Determining The Intermediate Role of Psychological Well-Being and Staff Empowerment in The Relationship Between Management Support and Employee Performance", *Sosyoekonomi*, 31(56), 109-128.
- Li, X. & C. Lin (2021), "The Influence of High-Commitment Work System on Work Well-being: The Mediating Role of Psychological Empowerment and The Moderating Role of Leader Trust", *Personnel Review*, 50(4), 1128-1147.
- McIlroy, T.D. et al. (2021), "The Effects of Unanswered Supervisor Support on Employees' Well-being, Performance, and Relational Outcomes", *Journal of Occupational Health Psychology*, 26(1), 49-68.
- Nabawanuka, H. & E.B. Ekmekcioglu (2022), "Millennials in the Workplace: Perceived Supervisor Support, Work-life Balance and Employee Well-being", *Industrial and Commercial Training*, 54(1), 123-144.
- Nisula, A.M. (2015), "The Relationship Between Supervisor Support and Individual Improvisation", *Leadership & Organization Development Journal*, 36(5), 473-488.
- Oktuğ, Z. (2017), "The Moderating Role of Individualism Collectivism Tendencies in the Relationship Between Psychological Empowerment Perception and Organizational Commitment", *Journal of Abant İzzet Baysal University Social Sciences Institute*, 17(3), 245-266.
- Özbozkurt, O.B. et al. (2021), "Analyzing The Relationship Between Structural Empowerment and Perceived Supervisor Support", *Journal of Transnational Management*, 26(35), 1-13.
- Özer, H. (2004), *Qualitative Variable Econometric Models: Theory and an Application*, Ankara: Nobel Publishing.
- Özer, K.O. et al. (2015), "The Effects of Employee Empowerment on Job: Istanbul Hotel Industry Research", *Kastamonu University Faculty of Economics and Administrative Sciences Journal*, 6(4), 104-115.
- Özkan-Tilki, T.Z. et al. (2021), "Serial Mediation Effects on Relationships Among Mobbing, Organizational Cynicism, Job Satisfaction and Turnover Intention: Research on Disabled Individuals in Organizations", *Studies in Psychology*, 41(1), 199-229.
- Pazy, A. & Y. Ganzach (2009), "The Effect of Perceived Support From School on Students' School Contribution in Two Forms of Pay", *Unpublished Manuscript*, Tel Aviv University.
- Pugh, S.D. (1991), *Organizational Behaviour*, Prentice Hall International (UK) Ltd.
- Rahi, S. (2021), "Investigating The Role of Employee Psychological Well-being and Psychological Empowerment With Relation to Work Engagement and Sustainable Employability", *Intl. Jrl. of Ethics and Systems*, 38(2), 266-285.
- Rousseau, D.M. & J. Parks (1993), "The Contracts of Individuals and Organizations", *Research in Organizational Behavior*, 15, 1-43.
- Ryff, C.D. & C.L.M. Keyes (1995), "The Structure of Psychological Well-being Revisited", *Journal of Personality and Social Psychology*, 69, 719-727.
- Sağlam-Arı, G. & A. Erganeli (2003), "The Impact of Psychological Empowerment Perception and Some Demographic Variables to Organizational Commitment", *Journal of Hacettepe University Faculty of Economics and Administrative Sciences*, 21(1), 129-149.
- Salgado, J.F. et al. (2019), "Subjective Well-Being and Job Performance: Testing of a Suppressor Effect", *Revista de Psicología Del Trabajo de Las Organizaciones*, 35(2), 93-102.
- Sekhar, C. & M. Patwardhan (2021), "Flexible Working Arrangement and Job Performance: The Mediating Role of Supervisor Support", *Intl. Jrl. of Productivity and Performance Management*, <https://doi.org/10.1108/IJPPM-07-2020-0396>.

- Shanock, L.R. & R. Eisenberger (2006), "When Supervisors Feel Supported: Relationships with Subordinates' Perceived Supervisor Support, Perceived Organizational Support, and Performance", *Journal of Applied Psychology*, 91(3), 689-695.
- Sigler, T.H. & C.M. Pearson (2000), "Creating an Empowering Culture: Examining the Relationship between Organizational Culture and Perceptions of Empowerment", *Journal of Quality Management*, 5, 27-52.
- Skerlavaj, M. et al. (2014), "I Get By With a Little Help From My Supervisor: Creative-idea Generation, Idea Implementation, and Perceived Supervisor Support", *The Leadership Quarterly*, 25(5), 987-1000.
- Sommovigo, V. et al. (2019), "Tunnel Construction Workers' Well-being: The Role of Job Control and Supervisor Support", *Intl. Jrl. of Construction Management*, 21(9), 945-957.
- Spreitzer, G.M. (1995), "Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation", *Academy of Management Journal*, 38(5), 1442-1465.
- Tarcan, G.Y. et al. (2021), "The Effect of Mushroom Management Style and Perceived Supervisor Support on Employee Performance: 'An Application With University Hospital Employees", *Intl. Jrl. of Health Planning and Management*, 36(2), 532-544.
- Telef, B.B. (2013), "Psychological Well-being Scale: Turkish Adaptation, Validity and Reliability Study", *Journal of Hacettepe University Faculty of Education*, 28(3), 374-384.
- Tunay, N. (2019), "The Effects of Empowerment on Work Satisfaction, Performance and Organizational Commitment of Employees: The Case of Turkish Insurance Sector", *Finance and Finance Articles*, (112), 241-258.
- Van, W. & B. Kroon (2020), "The Effect of Strengths-based Performance Appraisal on Perceived Supervisor Support and the Motivation to Improve Performance", *Frontiers in Psychology*, 11, <http://dx.doi.org/10.3389/fpsyg.2020.01883>.
- Weiss, H.M. & R. Cropanzano (1996), "Affective Events Theory: A Theoretical Discussion of the Structure, Causes and, Consequences of Affective Experiences at Work", *Research in Organizational Behavior*, 18, 1-74.
- Wright, T. & R. Cropanzano (2004), "The Role of Psychological Well-being in Job Performance: A Fresh Look at an Age-old Quest", *Organizational Dynamics*, 33(4), 338-351.
- Wright, T.A. & R. Cropanzano (2007), "Well-being, Satisfaction and Job Performance: Another Look at the Happy-Productive Thesis", *Academy of Management Proceedings*, 364-363.
- Yakut, E. (2020), "Determination of Factors Affecting Housing Selection Through Multi-Nominal Probit Model: Case of Osmaniye Province of Turkey", *BMIJ*, 8(3), 3274-3301.
- Yang, S.B. & S.O. Choi (2009), "Employee Empowerment and Team Performance Autonomy, Responsibility, Information, and Creativity", *Team Performance Management*, 15(5/6), 289-301.
- Yoon, J. & J.C. Lim (1999), "Organizational Support in the Workplace: The Case of Korean Hospital Employees", *Human Relations*, 52, 923-945.
- Zaman, Z.U. et al. (2019), "Impact of Perceived Organizational Support and Perceived Supervisor Support on In-Role and Extra Role Performance Through Mediating Effect of Employee Engagement", *Intl. Jrl. of Computer Science and Network Security*, 19(8), 98-104.
- Zhao, X. et al. (2010), "Reconsidering Baron and Kenny: Myths and Truths About Mediation Analysis", *Journal of Consumer Research Inc.*, 37(2), 197-206.