



THE EFFECT OF HIGH-PERFORMANCE WORK SYSTEMS ON SELF-LEADERSHIP

YÜKSEK PERFORMANSLI İŞ SİSTEMLERİNİN ÖZ-LİDERLİK ÜZERİNDEKİ ETKİSİ

Sevgin BATUK¹

Abstract

Self-leadership has emerged as a substitute for classical leadership approaches that treat external supervision as a requirement and focus on the leader rather than the employee. It is treated as a way of coping with the instability of the business environment, because organizations should utilize every single employee to be more lateral and adaptive. Self-leadership is a concept which asserts that every single employee can direct herself/himself when given the opportunity. In literature, self-leadership is majorly considered as an outcome of personality factors. In this paper, the effects of some contextual factors- sub-practices of high-performance work systems (HPWS)- on self-leadership are investigated through a survey conducted on a sample of 212 participants. According to results, participation in decision making, job security, selective staffing and results-oriented appraisal have positive contributions to self-leadership, whereas, contrary to expectations, extensive training is found to affect self-leadership negatively. Internal mobility, incentive rewards and job descriptions have no significant effect on self-leadership.

Keywords: Self-leadership, high-performance work systems, participation in decision making, training

Öz

Öz-liderlik, dışsal denetimi bir gereklilik olarak gören ve çalışandan çok lidere odaklanan klasik liderlik yaklaşımlarına bir ikame olarak ortaya çıkmıştır. İş çevresinin değişkenliği ile başa çıkma yöntemlerinden biri olarak değerlendirilmektedir, çünkü organizasyonların daha yatay ve adaptif olmak için her çalışandan faydalanması gerekmektedir. Öz-liderlik, şans verildiğinde, her çalışanın kendini yönlendirebileceğini öne süren bir kavramdır. Literatürde, öz-liderlik çoğunlukla kişilik özelliklerinin bir sonucu olarak ele alınmaktadır. Bu çalışmada, 212 kişilik bir örnekleme uygulanan bir anket çalışması aracılığıyla bazı bağlamsal faktörlerin-yüksek performanslı iş sistemleri (YPİS) alt uygulamalarının- öz-liderlik üzerindeki etkileri araştırılmaktadır. Sonuçlara göre, başta kararlara katılım olmak üzere iş güvenliği, seçici işe alım ve sonuç odaklı ödüllendirme öz-liderliğe pozitif katkı sağlamaktadır, fakat beklentilerin aksine, yoğun eğitimin öz-liderliği olumsuz yönde etkilediği görülmektedir. İç mobilitenin, teşvik ödüllerinin ve iş tanımlarının öz-liderlik üzerinde anlamlı bir etkisi bulunmamaktadır.

Anahtar Kelimeler: Öz-liderlik, yüksek performanslı iş sistemleri, kararlara katılım, eğitim

¹ Assistant Prof., Türk-Alman Universty, sevgin.batuk@tau.edu.tr, Orcid: 0000-0001-7917-713X

1. INTRODUCTION

Self-leadership is a relatively new concept that has emerged as a substitute for classical leadership approaches. In current volatile business environment, organizations have to adopt new strategies to cope with change and act proactively. In this respect, self-leadership has emerged as a way to enable employees take initiative and lead themselves when required. The literature on self-leadership has generally focused on the dispositional characteristics of employees and has regarded personality factors as antecedents or facilitators of self-management. In this paper, it is aimed to investigate the possible contextual factors that help employees to exert self-leadership skills. Within this approach, high-performance work systems (HPWS) are proposed as possible determinants of increased self-leadership activities.

Practices that are implemented to increase employees' performance opportunities are regarded as HPWS (Bozkurt, Ertemsir, & Bal, 2014). The aim lying beneath is the facilitation of employee autonomy and commitment through practices such participation in decision-making, training opportunities and information sharing (Lee & Bang, 2012). In this study, in line with Sun, Aryee and Law's (2007) conceptualization, HPWS are considered to consist of eight dimensions; selective staffing, extensive training, internal mobility, job (employment) security, clear job descriptions, results-oriented appraisal, incentive reward and participation. The contribution of each dimension on self-leadership is investigated to find out which practice may help more to facilitate self-leadership skills. The study is conducted with 212 participants by using survey method. Not surprisingly, the results showed that participation in decision-making had the major effect on the process of self-leadership development. As a striking result, extensive training had a negative effect on self-leadership, implying that, people tend to lessen their exertion of self-leadership as they take more job-related trainings.

2. LITERATURE

High-Performance Work Systems (HPWS)

Human resources are considered as a vital asset for competitive advantage in organizations (Pfeffer, 1994). In line with this, human resources practices are seen as sources for attracting and retaining right employees, which, in return, is expected to lead to better organizational performance (Yazid et al., 2017). These practices which help to support employees are regarded as high-performance work systems (HPWS). There are many different conceptualizations regarding HPWS but the common themes expressed in all descriptions are employee involvement, commitment and empowerment (Tomer, 2001).

Commonly, high-performance work systems are defined as practices that are implemented to improve employees' performance opportunities and to increase their motivations towards work (Bozkurt, Ertemsir, & Bal, 2014). The intention behind the implementation of HPWS is the activation and stimulation of employees' skills and capabilities (Datta, Guthrie, & Wright, 2005). Employee engagement and autonomy are aimed to be increased through use of HPWS such as participation in decision-making, training opportunities and information sharing (Lee & Bang, 2012).

Bamberger and Meshoulam (2000) state that strategic human resource management has adopted two approaches for the measurement of HPWS. The first one, resource based approach treats employees as resources and aims to develop them through training and career opportunities, whereas the second one, control approach, monitors employee performance and provides feedback (Delery & Doty, 1996; Snell, 1992). The resource based approach can be considered as a proactive tool for employee performance whereas the control approach is

rather a reactive tool to evaluate performance. These two aspects fail to cover all areas of human resource practices, and, therefore, Sun, Aryee and Law (2007) claim that it would be more appropriate to categorize high performance work practices under three subsystems; people flow, appraisal and rewards, and employment relation (p.560). People flow includes staffing, mobility, job security and training. Sample practices are selective staffing, giving more extensive training, defining clear career paths and assuring job security. Second dimension, appraisal and rewards, includes practices such as long-term, results-oriented appraisal and extensive rewards. The last category, employment relation is based on the job characteristics. Clear job descriptions, flexible job assignments and participation are the basic practices that constitute this dimension.

Accordingly, there are many different conceptualizations of HPWS. The intersection areas in all definitions in previous research include selective staffing, training, providing performance-based compensation and reward systems, and accommodating employees with flexibility (e.g. Datta et al., 2005; Huselid, 1995; Guthrie, 2001; Wood & Wall, 2002; Arthur, 1994; Pfeffer, 1994). The common point expressed in all conceptualizations is to provide employees with control and power to take initiative and manager themselves (Tomer, 2001).

Self-Leadership

Self-leadership is a rather new concept that has emerged as substitute for the shortcomings of previous leadership theories. Coined by Manz (1986), self-leadership is the process of motivating one's self for improved performance (Tabak, Sıgır, & Türkoz, 2013). Self-leadership aims to provide employees with opportunities to control and manage themselves. It is regarded as a process in which employees do not need exterior supervision and regulate themselves to achieve predetermined goals or tasks (Manz, 1986; Manz & Neck, 2004).

The major thing that distinguishes self-leadership from previous leadership types is that it emphasizes the role of the followers, not the leader. The importance of the leader is lower compared to followers. It is based on the "substitutes for leadership" theory by Kerr and Jermier (1978). If reinforcements that lead an employee to act towards a goal are not directed by the leader, but set by the employee himself/ herself, then this process can be referred as a substitute for leadership (Manz & Sims, 1980).

To be more precise, self-leadership is defined as "a process through which individuals control their own behavior, influencing and leading themselves through the use of specific sets of behavioral and cognitive strategies" (Neck & Houghton, 2006, p.270). Self-leadership is generally considered to have a three-dimensional structure; behavior-focused strategies, natural reward strategies and constructive thought pattern strategies (Manz & Neck, 2004; Prussia, Anderson, & Manz, 1998). Behavior-focused strategies include regulation of behavior to overcome unpleasant tasks by suppressing actions which may hinder success (Neck & Houghton, 2006). Natural reward strategies refer to concentrating on the inherently pleasant aspects of the job that are help to seek out situations that enable the individual to be motivated by the inherently enjoyable facets of the task (Manz & Neck, 2004). Constructive thought pattern strategies mainly include visualization of successful future performance for self-motivation (Houghton et al., 2004).

3. CONCEPTUAL FRAMEWORK

Literature on self-leadership has majorly focused on the effect of personality factors such as extraversion, openness to experience, proactivity and narcissism on self-leadership and has treated self-leadership as a natural outcome of basic individual characteristics.

Houghton and colleagues (2004) have shown that self-leadership has a positive correlation with extraversion and conscientiousness parallel to Furtner and Rauthmann's (2010) findings which show that there's a positive relationship between self-leadership and traits of extraversion and openness to experience. On the other hand, as a negative trait, narcissism is found to have a strong correlation with self-leadership (Furtner, Rauthman & Sachse, 2011). In terms of proactivity, it has been shown that the more proactive a person is, the higher levels of self-leadership skills he/she is likely to exhibit (Batuk Turan, 2018). Although not much has been done to investigate the contextual drivers of self-leadership, in a more recent study, it was shown that high-performance work systems and transformational leadership may also contribute positively to the facilitation of self-leadership skills (Batuk Turan, 2018). Within the framework of this research, this finding is taken a step further and it is aimed to explore which human resources activities may help more for the development of self-leadership skills.

High-performance work systems try to create an environment that encourages employee participation and employee commitment by offering arenas that may help them to develop their skills and knowledge (Tomer, 2001; Bozkurt, Ertensir, & Bal, 2014). In this respect, high-performance work systems operate on the same rationale with self-leadership.

From a resource based view, high-performance work systems treat employees as self-managed and self-controlled actors whose performance can be enhanced through use of human resources practices. These practices involve effective selection, development, extensive training and participation in decision-making (Özçelik, et al., 2016).

At the organizational level, and especially in terms of human resources activities, the research has focused on training and reward systems and it has been shown that these two factors have a significant effect on the exertion of self-leadership strategies (Stewart et.al, 2011). This research attempts to provide a more comprehensive approach and evaluates all the sub-dimensions of high-performance work systems independently as possible drivers of self-leadership.

Accordingly, the following hypotheses are proposed:

H1: There will be a positive relationship between selective staffing and self-leadership. As more selective staffing activities are employed, employees will tend to exhibit higher levels of self-leadership skills.

H2: There will be a positive relationship between training and self-leadership. As employees take more extensive training, they will tend to exhibit higher levels of self-leadership skills.

H3: There will be a positive relationship between internal mobility and self-leadership. As career paths of employees become clearer, they will tend to exhibit higher levels of self-leadership skills.

H4: There will be a positive relationship between job security and self-leadership. As employees feel more secure on the job, they will tend to exhibit higher levels of self-leadership skills.

H5: There will be a positive relationship between appraisal systems and self-leadership. As appraisal is based more on results, employees will tend to exhibit higher levels of self-leadership skills.

H6: There will be a positive relationship between incentive rewards and self-leadership. As employees are rewarded on the job, they will tend to exhibit higher levels of self-leadership skills.

H7: There will be a positive relationship between job descriptions and self-leadership. As job descriptions are clearer, employees will tend to exhibit higher levels of self-leadership skills.

H8: There will be a positive relationship between participation and self-leadership. As employees participate more in decision making, they will tend to exhibit higher levels of self-leadership skills.

4. METHODOLOGY

Sampling and Data Collection

The research was conducted in firms which basically operate in services sector including tourism, banking and insurance. Firms were especially chosen to be more institutionalized due to the essence of the research variables. A major determinant was that the firms included in the survey had human resources applications that could be observed and evaluated by the participants. In addition to that, employees have to take initiative and make personal decisions much more in services sector (Yıldır, 1994). Therefore, self-leadership can be observed in services sector more easily as the employees working in these firms are more likely to take part in decision-making and express themselves freely. In this respect, data from 212 participants were collected via online-survey method. The method of data collection is based on snowball sampling. For each firm, a contact person was determined and the survey was distributed through these contacts. The sample demographics can be found in Table 1.

Table 1. Sample Demographics

Characteristic	Category	Frequency	Percentage
<i>Gender</i>	Men	144	68%
	Women	68	32%
<i>Age</i>	Younger than 25	82	38.6%
	26-35	95	44.8%
	36-45	28	13.2%
	46-55	5	2%
	Older than 56	2	0.9%
<i>Education level</i>	Secondary school	27	12.7%
	High school	96	45.2%
	Undergraduate	87	41%
	Graduate	2	0.9%
<i>Sector</i>	Tourism	97	45.7%
	Banking and Financial Services	61	28.7%
	Insurance	54	25.4%

Data Collection and Measurement

High performance work systems (HPWS) were measured by the scale developed by Sun, Aryee and Law (2007). The scale consisted of 22 items measuring eight dimensions;

selective staffing, extensive training, internal mobility, job security, clear job descriptions, results-oriented appraisal, incentive reward and participation.

In order to measure self-leadership, the Abbreviated Self-Leadership Questionnaire (ASLQ) by Houghton, Dawley and DiLiello (2012) was used. The scale consisted of 9 items.

The items of all instruments were rated on a 5-point Likert scale ranging from 1 (definitely disagree) to 5 (definitely agree).

Data Analyses

In order to test the proposed hypotheses, IBM Statistics 22 was used. The hypotheses were tested by using multiple linear regression analysis. Before conducting regression, the scales were tested for normality. The skewness and kurtosis statistics were between -1 and +1 interval for all scales indicating that the data were normally distributed (Mishra et al., 2019).

The reliability of the scales were tested through Cronbach Alpha scores. All Cronbach Alpha statistics yielded scores higher than .70 indicating high internal reliability for all scales.

Table 2. Reliability Statistics

Construct	Reliability Statistics (Cronbach Alpha)
Selective Staffing	.901
Extensive Training	.930
Internal Mobility	.918
Employment Security	.839
Clear Job Descriptions	.905
Results-oriented Appraisal	.862
Incentive Reward	.888
Participation	.915
Self-leadership	.969

Afterwards, correlation analyses were conducted in order to see if the variables satisfy the conditions for regression analysis. The correlation results are indicated below in Table 3.

Table 3. Correlation Coefficients

Construct	Sel. Staf.	Ext. Trai.	Int. Mob.	Job Sec.	Job Desc.	Res.Or. Appra.	Inc. Rew.	Part.	Self Lead.
Sel.Staf.	1								
Ext.Trai.	.741	1							
Int.Mob.	.694	.753	1						
JobSec.	.697	.715	.758	1					
JobDesc.	.768	.703	.710	.729	1				
Appra.	.714	.702	.740	.737	.756	1			
Inc.Rew.	.605	.649	.660	.638	.656	.659	1		
Part.	.720	.745	.767	.754	.753	.761	.727	1	
SelfLead.	.708	.657	.720	.747	.735	.739	.622	.767	1

*All correlations are significant at the 0.01 level.

There are significant correlations between all independent variables and self-leadership and that is considered as a prerequisite for regression analysis. On the other hand, there are strong correlations among all independent variables. Although these high correlations may be a sign of multicollinearity among independent variables, Hair et.al indicate that high correlations may imply signals of multicollinearity generally when the correlations are .90 or higher (Hair et al, 2014).

VIF indices of the variables are also considered as signals of multicollinearity, therefore, in addition to correlations, VIF indices should also be examined in order to make certain that multicollinearity is not a problem within the context of this research.

In this respect, regression analysis is conducted for the model and VIF indices are interpreted. The generally accepted threshold for VIF indices is 10. That means that if VIF index exceeds 10, then there may be multicollinearity problem in the regression model (Hair et al., 2014).

Below in Tables 4 and 5, the regression results and VIF indices of the variables are given respectively. The model is found to be significant.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.876	.767	.759	.54635

In multiple regression analyses, adjusted R square is preferred to interpret the power of the model. Here, the adjusted R square shows that, approximately %76 of the variance in self-leadership can be explained by the independent variables included in the model.

Table 5: Regression Coefficients

Model	Beta	Sig.	Collinearity Statistics	
			Tolerance	VIF
(Constant)		.222		
Internal Mobility	.136	.064	.181	5.510
Job Descriptions	.101	.148	.198	5.038
Results Oriented Appraisal	.139	.035	.224	4.462
Incentive Rewards	.002	.972	.365	2.741
Selective Staffing	.172	.006	.252	3.970
Extensive Training	-.173	.006	.247	4.045
Job Security	.190	.004	.226	4.425
Participation	.365	.000	.135	7.393

*Dependent Variable: Self-leadership

VIF indices of all variables are below the threshold of 10, implying that multicollinearity does not pose a problem for the model. The significance of the regression coefficients show that internal mobility, job descriptions and incremental rewards do not contribute to self-leadership; therefore H3, H6 and H7 are rejected. The most effective variable is found to be participation with a beta of .365, providing support for H8. This implies that every 1 unit increase in participation is expected to lead to .365 increase in self-leadership. Job security, selective staffing and results-oriented appraisal are also found to contribute positively to self-leadership providing support for H1, H4 and H5. Contrary to expectations, training is found to have a negative impact on self-leadership and, therefore, H2 is rejected. It is seen that as people get more job-related training, they begin to lessen their exertion of self-leadership.

Table 6: Summary of Hypotheses Testing

No.	Hypothesis	Result
H1:	There will be a positive relationship between selective staffing and self-leadership. As more selective staffing activities are employed, employees will tend to exhibit higher levels of self-leadership skills.	Supported
H2:	There will be a positive relationship between training and self-leadership. As employees take more extensive training, they will tend to exhibit higher levels of self-leadership skills.	Rejected
H3:	There will be a positive relationship between internal mobility and self-leadership. As career paths of employees become clearer, they will tend to exhibit higher levels of self-leadership skills.	Rejected
H4:	There will be a positive relationship between job security and self-leadership. As employees feel more secure on the job, they will tend to exhibit higher levels of self-leadership skills.	Supported

H5:	There will be a positive relationship between appraisal systems and self-leadership. As appraisal is based more on results, employees will tend to exhibit higher levels of self-leadership skills.	Supported
H6:	There will be a positive relationship between incentive rewards and self-leadership. As employees are rewarded on the job, they will tend to exhibit higher levels of self-leadership skills.	Rejected
H7:	There will be a positive relationship between job descriptions and self-leadership. As job descriptions are clearer, employees will tend to exhibit higher levels of self-leadership skills.	Rejected
H8:	There will be a positive relationship between participation and self-leadership. As employees participate more in decision making, they will tend to exhibit higher levels of self-leadership skills.	Supported

In addition, post hoc analyses are conducted to see whether self-leadership differs across sectors and gender. First, self-leadership scores of participants are compared through ANOVA analysis to check for differences across sectors. The results show that there is a significant difference among groups. Therefore, Tamhane analysis is conducted to examine the interrelations among groups. It is seen that banking and financial services sector differs significantly from the other two sectors with a higher mean score for self-leadership whereas no significant difference is observed between tourism and insurance sectors.

Table 7: ANOVA Results

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	21.894	2	10.947	10.117	.000
Within Groups	226.138	209	1.082		
Total	248.032	211			

Table 8: Self-Leadership Means across Industries

	N	Mean
Tourism	97	3.72
Banking and Financial Services	61	4.70
Insurance	54	3.91
Total	212	4.05

Afterwards, t-test analysis is conducted to see if self-leadership differs according to gender. The results yield that there is no significant difference between female and male participants with respect to self-leadership ($p > .05$). Mean self-leadership for males is calculated as 3.72 whereas the mean for females is found to be 3.80.

Table 9: T-test Results for Gender

	Levene's Test for Equality of Variances	
	F	Sig.
Self-Leadership		
Equal variances assumed	.22	.64
Equal variances not assumed		

5. DISCUSSION AND CONCLUSION

Self-leadership is a promising concept for organizations that strive for gaining a competitive edge. With the rise of trends such as active employee participation, involvement and self-managing teams, further emphasis has been put on individual's role for the organization. In this respect, self-leadership has gained vital importance for institutions which aim to evolve relative to the requirements of the turbulent business environment.

This research aims to provide an insight about the possible conceptual drivers of self-leadership and questions if self-leadership can be facilitated through conceptual factors. In this respect, the dimensions of high-performance work systems are investigated. The results of the analyses show that, as expected, employee participation in decision making has the major contribution to the exertion of self-leadership activities. When offered the chance to take initiative and play an active role, employees tend to lead themselves towards pre-defined goals. In self-determination theory, Ryan and Deci state that individuals inherently have needs regarding self-determination and autonomy; and when they feel free, individuals will be self-determined and will act out of choice rather than of obligation (Ryan& Deci, 2000; 2007). In this respect, involving individuals in decision making can facilitate their tendency to manage themselves without needing exterior supervision.

Job security, selective staffing and results-oriented appraisal are found to be other major facilitators of self-leadership skills. When employees feel that they have the opportunity to work at the organization as long as they want or as long as there is a mutually beneficial relationship, they may tend to behave more as they are and follow their own path. In a similar sense, when people are matched with the right positions through which they can evolve and that their capabilities are in line with the requirements of the job, it is easier for them to feel free, take initiative and make decisions. In this respect, staffing plays an important role. Also, when employees are rewarded for the effort they put forward, it may strengthen their belief in themselves, their decisions and the organization. This contributes positively to the employees' trust in the organizations and also enables them to develop a sense of control over their work (Lawler, Mohrman, & Ledford, 1992).

The findings show that internal mobility, job descriptions and incentive rewards have no significant effect on the exertion of self-leadership skills. Job descriptions may be considered as a constraint against free behavior; therefore, people have to go beyond job-related boundaries to decide on their own without requiring external supervision and direction. Also, contingent motivators such as incentive rewards do not add to the development of self-leadership.

As the most striking result, it is seen that extensive training has a negative effect on self-leadership although previous research implies that training has positively contributed to

the use of self-leadership strategies (e.g. Latham & Frayne, 1989; Neck & Manz, 1996). Job-related training is aimed to deepen applicable knowledge for the completion of the tasks given, but from a different perspective, with the specialization it provides, more training may hinder autonomous action since it creates a boundary in which the employee should stay. In this respect, when an employee takes more training about the job, she/he is limited with that information and may not be able to think out of the box.

With regard to industry, it was seen that employees working in banking and financial services sector tend to exert more self-leadership in comparison to other sectors included in the study. It can be inferred that finance industry is a dynamic sector which requires fast decision-making and high adaptability; therefore, employees are more likely to develop self-leading skills and utilize their capacities to take initiative.

As seen from the results, organizations should involve employees in decision making and care about the employment process not only for themselves but also for the employee. They should make sure that employees feel safe within the organization and do not perceive any threat against free action. They should provide a just and fair environment in which employees are rewarded based on performance and these rewards should not be temporary but it should be felt that they are important and their successful actions will always be supported.

To sum up, context may foster or hinder autonomy. Self-leading requires autonomy as well as knowledge. Therefore, to get the best from the employees and to encourage them towards being self-leaders, organizations should donate the employees with the opportunities and context that may give them freedom besides knowledge. In organizations that value self-management and development, before anything else, self-leadership training should be offered to employees. People may be able to utilize the opportunities offered to them if they are capable of seeing and if they do not feel obliged to anything.

REFERENCES

- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37(3), 670 – 687.
- Bamberger, P., & Meshulam, I. (2000). *Human resource strategy*. Thousand Oaks, CA: Sage.
- Batuk Turan, S. (2018). *Self-leadership: Determinants and outcomes*. Peter Lang.
- Bozkurt, S., Ertemsir, E., Bal, Y. (2014). A study evaluating the validity and reliability of high performance work systems (HPWS) scale in Turkish, *Proceedings of 12th International Academic Conference*, (pp.187-195), Prague: International Institute of Social and Economic Science.
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labor productivity: Does industry matter? *Academy of Management Journal*, 48(1), 135–145.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802– 835.
- Furtner, M. R. & Rauthmann, J. F. (2010). Relations between self-leadership and scores on the Big Five. *Psychological Reports*, 107(2), 339-353.

- Furtner, M. R., Rauthmann, J. F., & Sachse, P. (2011). The self-loving self-leader: Examining relations between self-leadership and the Dark Triad. *Social Behavior and Personality*, 39(3), 369-380.
- Guthrie, J. P. (2001). High-involvement work practices, turnover, and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180–190.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2014). *Multivariate data analysis*, Pearson.
- Houghton, J. D., Bonham, T. W., Neck, C. P., & Singh, K. (2004). The relationship between self-leadership and personality: A comparison of hierarchical factor structures. *Journal of Managerial Psychology*, 19(4), 427-441.
- Houghton, J.D., Dawley, D., & DiLiello, T.C. (2012). The abbreviated self-leadership questionnaire (ASLQ): A more concise measure of self-leadership. *International Journal of Leadership Studies*, 7(2), 216–232.
- Huselid, M. A., (1995). The impact of human resource management practices on turnover, productivity and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, 22(3), 375-403.
- Latham, G. P., & Frayne, C. A. (1989). Self-management training for increasing job attendance: A follow-up and a replication. *Journal of Applied Psychology*, 74, 411-416.
- Lawler, E. E., Mohrman, S. A., & Ledford, G. E. (1992). *Creating high performance organizations*. San Francisco, CA: Jossey-Bass.
- Lee, J. W., & Bang, H. (2012). High performance work systems, person-organization fit and organizational outcomes. *Journal of Business Administration Research*, 1(2), 129–138.
- Manz, C. C. (1986). Self-leadership: Toward an expanded theory of self-influence processes in organizations. *Academy of Management Review*, 11(3), 585-600.
- Manz, C. C., & Neck, C. P. (2004), *Mastering self-leadership: Empowering yourself for personal excellence*, Upper Saddle River, NJ: Pearson Prentice-Hall.
- Manz, C. C., & Sims, H. P., Jr. (1980) Self-management as a substitute for leadership: A social learning theory perspective. *Academy of Management Review*, 5(3), 361-367.
- Mishra, P., Pandey, C. M., Singh, U., Guta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, 22 (1): 67-72.
- Neck, C. P. & Houghton, J. D. (2006). Two decades of self-leadership theory and research: past developments, present trends, and future possibilities. *Journal of Managerial Psychology*, 21(4), 270-295.
- Neck, C. P., & Manz, C. C. (1996). Thought self-leadership: The impact of mental strategies training on employee cognition, behavior, and affect. *Journal of Organizational Behavior*, 17, 445-467.
- Özçelik, G., Aybas, M. & Uyargil, C. (2016). High performance work systems and organizational values: Resource-based view considerations. *Procedia - Social and Behavioral Sciences*, 235, 332-341.

- Pfeffer, J. (1994). *Competitive advantage through people*. Boston: Harvard Business School Press.
- Prussia, G. E., Anderson, J. S., & Manz, C. C. (1998). Self-leadership and performance outcomes: the mediating influence of self-efficacy. *Journal of Organizational Behavior*, 19(5), 523-38.
- Ryan, R. M., & Deci, E. L. (2007). Active human nature: Self-determination theory and the promotion and maintenance of sport, exercise, and health. In M. S. Hagger & N. L. D. Chatzisarantis (Eds.), *Intrinsic motivation and self-determination in exercise and sport* (pp. 1-19). Champaign, IL: Human Kinetics.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Snell, S. A. (1992). Control theory in strategic human resource management: The mediating effect of administrative information. *Academy of Management Journal*, 35(2), 292-327.
- Sun, L. Aryee, S., & Law, K. (2007). High-performance human resource practices, citizenship behavior and organizational performance: A relational perspective, *Academy of Management Journal*, 50(3), 558-577.
- Tabak, A., Sıgır, Ü., & Türköz, T. (2009) Öz liderlik (Kendi kendine liderlik) ölçeği Türkçe formunun uyarılma çalışması, 17. *Ulusal Yönetim ve Organizasyon Kongresi*, (pp.303-309).Eskişehir: Osmangazi Üniversitesi.
- Tomer, J. F. (2001). Understanding high performance work systems: The joint contribution of economics and human resource management. *Journal of Socio-Economics*, 30(1), 63-73.
- Wood, S., & Wall, T. D. (2002). Human resource management and business performance. In P. Warr (Ed.), *Psychology at work* (pp. 351– 374). London: Penguin.
- Yazid, Z.N.A, Yahya, W. K., Ishak, M, & Achim, N. (2017). High Performance Work System (HPWS) and Organizational Performance: The Mediating Role of Employee Attitude, *Intervarsities Multidisciplinary International Conference 2017*.
- Yıldır, G. (1994). Hizmet Sektöründe Performans Ölçümü ve Önemi. *II. Verimlilik Kongresi, Bildiriler Kitabı*. Ankara: MPM Yayınları, No: 540.