Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

ECONOMICS
& Sociology

DISSEMINATING EXTRA-ROLE SERVICE BEHAVIOR IN THE PUBLIC SECTOR: THE EFFECT OF HEALTH-ORIENTED LEADERSHIP AND WORK ENGAGEMENT

Gökhan Kerse
Kafkas University, Faculty of Economics and Administrative Sciences, Kars, Turkiye,
E-mail: gokhankerse@hotmail.com
ORCID 0000-0002-1565-9110

Şefik Özdemir
Aksaray University, Faculty of Health Sciences, Aksaray, Turkiye
E-mail: sefikozdemir@aksaray.edu.tr
ORCID 0000-0003-3005-0570

Mesut Soyalın
Siirt University, Faculty of Economics and Administrative Sciences, Siirt, Turkiye,
E-mail: msoyalin@hotmail.com
ORCID 0000-0003-1475-0905)

ABSTRACT. This study focused on health-oriented leadership (HoL), attempting to determine whether this new type of leadership affects extra-role service behavior either directly or indirectly (through work engagement). Data were collected from public employees working in the service sector in a province in Turkey through the convenience sampling method. The study hypotheses were tested with structural equation modeling (SEM) using the SmartPLS software. The analysis findings have revealed that the perception of health-oriented leadership positively affects extra-role service behavior. Moreover, this effect was present not only directly, but also indirectly (through work engagement). The findings have also confirmed that health-oriented leadership is important in increasing public employees' engagement and extra-role service behaviors. Therefore, it was determined that health-oriented leadership brings positive outcomes in the public sector.

Introduction

The concept of health, which is considered important in both working and daily life, has become more relevant due to the recent Covid-19 pandemic. The pandemic adversely affected both social and business life, once again demonstrating and emphasizing the importance of health and well-being (Mishchuk et al., 2023). It also prompted organizations to redesign their

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

physical environments, intensively implementing working styles such as working from home/remotely (Bencsik & Juhasz, 2023). One of the goals behind these changes in the way managers and leaders work was to help employees protect their health and encourage (2022) also claimed that the healthy communication that leaders established with their employees during the COVID-19 crisis helped to build their trust, and in this context, communication rates, when applied in a highly effective way, enabled them to more easily face traumatic events.

In addition to being a role model for healthy living, the fact that leaders can contribute to employee health by improving working conditions (Efimov et al., 2020; Winiarski et al., 2021) paved the way for the emergence of a new type of leadership called health-oriented leadership. Health-oriented leadership, which refers to behavioral models, activities and habits (general health-specific habits such as physical exercise and diet) related to the protection, improvement or restoration of the health of individuals in the organization (Klug et al., 2019), focuses on the components of leadership behaviors that can positively affect the work environment of employees (Jiménez et al., 2013). Health-oriented leadership, which is also defined as a series of significant leadership behaviors that can affect employee health (Gurt et al., 2011), assumes taking responsibility for employee health, communicating about health-related issues and setting an agenda for the improvement of workplace health (Jiménez et al., 2013) and focuses on leadership behaviors that positively affect the work environment of employees (Jiménez et al., 2017).

Health-oriented leaders try to benefit both the organization and the employees by creating a working environment in which employees can improve their health and promoting a healthy lifestyle through the above-mentioned behaviors. As a matter of fact, some studies in the literature have found that health-oriented leadership leads to positive results for both organizations and employees (Franke & Felfe, 2011; Santa Maria et al., 2019; Bregenzer et al., 2020). But can health-oriented leadership also make a similar positive contribution to extra-role service behavior, which refers to a behavior that is not included in the job description but is for the benefit of the organization? In addition, can work engagement mediate this contribution?

Taking the above questions as a reference, this study is expected to contribute to the literature in a number of ways. The first is to contribute to the related field due to the lack of sufficient studies in the national and international literature on health-oriented leadership, which is a relatively new type of leadership. As a matter of fact, although it is relatively common in the international literature (Santa Maria et al., 2019; Kaluza et al., 2021; Arnold & Rigotti, 2021), the fact that only one study was conducted in the national literature (Kerse et al., 2021) indicates a lack in the literature. Secondly, the sample in the study consists of public employees who have a key role in solving many crises and problems in terms of extra-role service behavior. Therefore, the findings of study on whether health-oriented leadership increases extra-role service behaviors in public employees are important. Thirdly, the mediating role of work engagement, which was found to be a mediating variable in the relationship between different leadership types and different variables (Park et al., 2014; Lai et al., 2020), in the effect of health-oriented leadership on extra-role service behaviour was examined for the first time in this study. To summarize, the present study makes a contribution to the literature by determining whether the perception of health-oriented leadership contributes to public employees carrying out beneficial work for their organizations in addition to their defined roles and responsibilities (extra-role service behavior) and whether this contribution is realized through work engagement.

1. Literature review

1.1. Health-oriented leadership (HoL)

Leadership is the process of influencing others and thus directing them toward goals (Knezevic, 2023). Health-oriented leadership (HoL), defined as a preventive approach to behavioral and organizational health, refers to the leader's attention to both his/her own physical and psychological health and the health of employees through communication and leadership behavior as a role model (Stuber et al., 2021). The HoL approach also focuses on designing leader communication and working conditions in a health-promoting manner and draws attention to the awareness and values of leaders towards follower health (Franke & Felfe, 2011). In this regard, HoL is defined as a special type of leadership that benefits employees by creating health-promoting working conditions (Jiménez et al., 2013).

The HoL can also be addressed in terms of health-specific communication (Gurt et al., 2011). Health-specific communication includes motivating employees to participate in health-promoting activities and adopt a healthy lifestyle, as well as talking directly with employees who appear stressed and finding solutions together (Franke et al., 2014). In this way, the tension in working conditions can be reduced and the potential for improving health can be realized (Arnold & Rigotti, 2020). Leaders with a health-oriented aspect can affect employee health by taking responsibility for their health, encouraging them to participate in activities that will improve their health (directly), and designing their working conditions in a way that will positively affect their health (indirectly) (Efimov et al., 2020; Bregenzer et al., 2020). This type of leadership includes a number of critical variables (workload, control, reward, equality, and values). When these variables are poorly managed, there may be some incompatibility between the employees and workplace conditions, which may cause negativities in terms of employee health. In this context, leaders can indirectly affect employee health by changing their working conditions (Efimov et al., 2020; Bregenzer et al., 2020).

The HoL consists of three components: health awareness, value of health, and health behavior (Franke & Felfe, 2011). Health behavior includes providing healthy working conditions (through climate and job design), encouraging employees to exhibit healthy working behavior (such as following safety rules, avoiding overtime and disturbances), and providing information on health (Franke et al., 2014). The value of health is related to the leader's concern for the health of employees and his/her sense of responsibility for their health (Arnold & Rigotti, 2020). Finally, health awareness refers to the ability of the leader to evaluate employee stress levels correctly and to be aware of the signs of stress among the employees (Franke et al., 2014; Franke & Felfe, 2011).

1.2. The relationship between health-oriented leadership and work engagement

Work engagement refers to a positive emotional and cognitive situation characterized by employees having a high level of energy and mental endurance while doing work, being willing to make an effort for their work, and exhibiting perseverance in the face of difficulties (Schaufeli & Bakker, 2004). Kahn (1990), who introduced this concept to the literature, defined work engagement as an individual's physical, cognitive, and emotional commitment to their job. Accordingly, employees engaged to their work produce positive results at the individual and organizational level by making more effort in their jobs with high energy and enthusiasm (Kahn, 1990; Schaufeli et al., 2002; Schaufeli, 2012).

Work engagement is recognized as a concept that is negatively related to burnout and can be explained with it (Schaufeli, 2012). Therefore, the relationship between HoL and work

engagement can be explained based on studies suggesting that work engagement can be seen as the positive antithesis of burnout (Maslach & Leiter, 1997; Schaufeli et al., 2002; Schaufeli & Bakker, 2004; Schaufeli, 2012). Based on the findings obtained in previous studies that indicate that HoL negatively effects burnout (Kaluza & Junker, 2022; Horstmann, 2018; Santa Maria et al., 2019), HoL and work engagement can be suggested to have a positive relationship. As a matter of fact, Shin and Hur's (2021) findings that employees' perceptions of corporate policies and practices that support their physical and psychological health and the leader's awareness of employee health problems and concerns positively effect work engagement support this assumption.

The relationship between HoL and work engagement can also be explained by the Conservation of Resources (COR) Theory (Hobfoll, 1989; Hobfoll, 2001). The COR theory begins with the principle of making efforts to obtain, retain, nurture and maintain resources that individuals value, and suggests that individuals can overcome the challenges they face in organizations if these resources are obtained and retained (Hobfoll et al., 2018). According to this theory, individuals need resources such as conditions, energy, personal characteristics and objects consisting of different factors to maintain their psychological and physical well-being (Kaluza & Junker (2022). When evaluated within the context of HoL, it can be stated that these resources are the conditions and factors that contribute to the followers' abilities to lead a physically and psychologically healthy life in the working environment (Kerse et al., 2021). Leaders who are health-oriented, on the one hand, ensure that regular breaks are provided to increase the well-being of their followers, and on the other hand, they carry out activities to eliminate conditions such as role conflict and job insecurity that may impair the well-being of followers (Franke et al., 2014). Based on the COR theory, Hobfoll (1989; 2001) suggested that individuals may be more resistant to stress and burnout if they obtain and retain the resources that they desire. Therefore, these health-oriented leadership behaviors and the resources obtained by employees can increase employees' engagement in work by enabling them to be resistant to stress and burnout while feeling more energetic (Hobfoll, 2001; Hobfoll et al., 2018). Based on all these theoretical assumptions and empirical findings, the following hypothesis can be developed:

H₁. HoL positively effects work engagement.

1.3. The relationship between health-oriented leadership and extra-role service behavior

Extra-role behaviors are the willingness to exhibit behaviors for the benefit of the organization by going beyond the specified job descriptions (Van Dyne et al., 1995). On the other hand, extra-role service behaviors include voluntary and helpful behaviors that are not necessary for providing basic services but are beneficial to the organization, employees or other customers (Bove et al., 2009). Since organizational citizenship behaviors are typically among the extra-role behaviors that increase employees' organizational effectiveness (Bove et al., 2009), the relationship between HoL and extra-role service behavior can be explained through organizational citizenship behavior. Previous empirical studies show that many types of leadership are important drivers of extra-role behavior and organizational citizenship behavior. For example, some researchers (Kerse, 2021; Srivastava & Dhar, 2019; Gill & Mathur, 2007; Aboramadan et al., 2022) have found that ethical leadership, authentic leadership, transformational leadership and servant leadership positively effect extra-role behaviors. In addition, findings in the literature indicate that some leadership styles positively effect organizational citizenship behavior, which is a type of extra-role behavior (Babcock-Roberson & Strickland, 2010; Mo & Shi, 2017; Purwanto et al., 2021). Although there are no studies on

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

the relationship between HoL and extra-role service behavior, based on these empirical findings that examine the relationship between other leadership styles and extra-role behaviors, it can be expected that HoL effects extra-role service behavior. Therefore, the following hypothesis can be developed:

H2. HoL directly positively effects extra-role service behavior.

1.4. The relationship between work engagement and extra-role service behavior

Work engagement affects organizational outcomes as well as employees' dedication, concentration and energy in their work. Employees who are engaged to their work are more willing to exhibit behaviors towards "making extra progress" for their organization such as taking individual initiative, exhibiting less absenteeism, learning more, becoming an important part of their organization and going beyond what is expected of them (Schaufeli, 2012). Therefore, it can be argued that if employees are immersed in their work and devote themselves to it (presence of work engagement), they are more likely to engage in extra-role behaviors. As a matter of fact, several studies in the literature show that work engagement positively effects extra-role performance and extra-role behavior (Shokory & Suradi, 2018; Demerouti et al., 2015). In another study, Orlowski et al. (2021) suggested that work engagement increases extra-role customer service behaviors. In addition to these studies, studies indicating that work engagement positively effects organizational citizenship behavior, which is an extra-role behavior (Kataria et al., 2013; Fındıklı, 2015), reinforce the possibility that work engagement positively affects extra-role service behavior. Based on this empirical framework, we propose the following hypothesis:

H3. Work engagement positively effects extra-role service behavior.

1.5. Work engagement as a mediating variable

There is much evidence in the literature suggesting that work engagement is an important mediator between various precursors and positive work outcomes (Schaufeli & Bakker, 2004; Park et al., 2014; Karatepe, 2015). The studies on some leadership styles, which are among the precursors, have also proved that engagement mediates other organizational outcomes (Chan, 2019; Babcock-Roberson & Strickland, 2010; Lai et al., 2020). In addition to these empirical findings, considering the COR theory, it can be argued that work engagement can potentially mediate the positive relationship between HoL and extra-role service behavior. That is to say; it can be claimed that health-oriented leaders increase employee work engagement, especially because they provide employees with accessible resources for their health, therefore leading employees who are engaged to their work to engage in behaviors that may be beneficial to the organization apart from their defined tasks. Thus, the following mediation hypothesis can be developed:

H4. Work engagement has a mediating role in HoL's effect on extra-role service behavior.

The following research model was established for the hypotheses developed in the research:
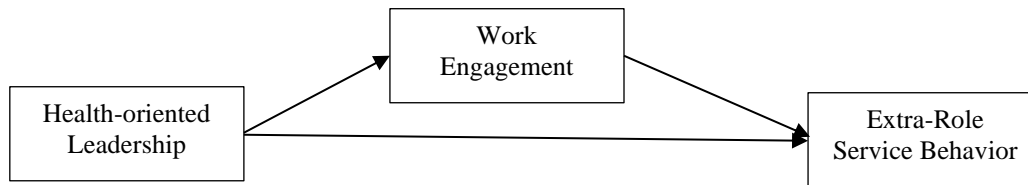
Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

Figure 1. The research model

2. Methodological approach

2.1. Participants and procedures

Data were collected from public employees working in the service sector in a province in Turkey. Data were obtained through surveys using the convenience sampling method. The surveys were shared virtually (e-mail and Whatsapp) due to the pandemic. The number of employees in the public institution is approximately 550. According to statistical calculations, the sample size should be at least 226 (https://www.surveysystem.com/sscalc.htm). Questionnaires were sent to 308 people and the response rate was approximately 83 percent. Public employees were asked to participate in the survey on a voluntary basis. In the end, 256 participants working in different public institutions responded. Of the participants, the majority were male (68.8%) and married (72.7%), worked for 9 years or more (40.6%), and had an associate/undergraduate level of education (93.7%).

There are several reasons for selecting public employees for the research sample. The first one is that today's public sector includes the use of digital capabilities unlike traditional business environments (Bilan et al., 2023). In this sector, managers' leadership of their employees involves a different set of challenges than in traditional business environments (Napolitano, 2016) and is considered important for public sector innovation (Sazzad et al., 2021). Data were obtained from the public sector since this study discusses the variable of health-oriented leadership, which is a contemporary type of leadership. Secondly, work engagement, which is another variable used in the research, is an important variable for the public sector as it ensures the formation and continuation of public service motivation (Bakker, 2015) and in the absence of work engagement, billions of dollars of productivity losses occur every year (Napolitano, 2016).

2.2. Measures

The scales used in the research were selected from scales with previously proven reliability and validity. A 5-point Likert type (1: Strongly Disagree – 5: Strongly Agree) response was requested for each scale item. The scale developed by Franke et al. (2014) and Pundt and Felfe (2017) and adapted by Kerse et al. (2021) was used to measure the HoL perception of the participants. In the research, the positive health behavior dimension in this scale (HoL StaffCare (followers)) was taken into consideration and employee perceptions were determined with 10 items. The health-oriented leadership variable was abbreviated as "HoL" in the analyses. Participant work engagement levels were measured using the 3-item one-dimensional scale developed by Schaufeli et al. (2006) before being reduced and proven to be valid and reliable by Güler et al. (2019). The work engagement variable was abbreviated as "WE" in the analyses. Extra-role service behavior of the participants were measured using the

5-item one-dimensional scale developed by Bettencourt and Brown (1997). The variable of the extra-role service behavior was abbreviated as "ERSB" in the analyses.

3. Conducting research and results

3.1. Findings on scale reliability and validity

A confirmatory factor analysis was carried out using the SmartPLS software to examine the reliability and validity criteria for the scales in the research model. In this direction, firstly, internal consistency reliability was examined (Table 1). The Cronbach's Alpha (ERSB= 0.944; HoL = 0.961; WE= 0.898), rho_A (ERSB= 0.947; HoL = 0.965; WE= 0.900) and CR (Composite Reliability) (ERSB= 0.945; HoL = 0.961; WE = 0.899) values of the scales were determined to be greater than 0.70 (Hair et al., 2017), thus reliability was ensured.

Convergent validity and discriminant validity analyses were performed to ensure scale validity. Since the factor loads of the items in the scales were higher than 0.40 and the scale AVE (Average Variance Extracted) values were higher than 0.50 (Hair et al., 2017), it was seen that there was convergent validity (Table 1).

Table 1. Findings on internal consistency reliability and convergent validity

	Factor Loadings	Cronbach's Alpha	rho_A	CR	AVE
ERSB1	0,902	0,944	0,947	0,945	0,775
ERSB2	0,902				
ERSB3	0,892				
ERSB4	0,797				
ERSB5	0,904				
HoL1	0,773	0,961	0,965	0,961	0,714
HoL2	0,839				
HoL3	0,889				
HoL4	0,832				
HoL5	0,947				
HoL6	0,636				
HoL7	0,779				
HoL8	0,850				
HoL9	0,916				
HoL10	0,941				
WE1	0,829	0,898	0,900	0,899	0,748
WE2	0,893				
WE3	0,872				

HoL= Health-oriented Leadership; WE= Work Engagement; ERSB= Extra-Role Service Behavior
Source: own calculation

The study also examined the values regarding discriminant validity (Table 2). The findings showed that, as taken into account as reference (Fornell & Larcker, 1981), the Fornell-Larcker criterion values were greater than the correlation coefficients between them and other variables. Moreover, examining the HTMT values revealed that they were lower than 0.90 (0.817; 0.834; 0.848) as referenced (Henseler et al., 2015). Therefore, all these findings indicate that discriminant validity was achieved.

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

Table 2. Means, standard deviations, correlations, and discriminant validity results

| Scales | Mean | S.D. | Fornell-Larcker Criterion | | | HTMT | | |
			ERSB	HoL	WE	ERSB	HoL	WE
ERSB	3,461	1,041	**0,880**					
HoL	3,302	,956	0,821	**0,845**		0,817		
WE	3,423	1,055	0,834	0,849	**0,865**	0,834	0,848	

Source: own calculation

3.2. Testing the hypotheses

The research model and hypotheses were tested using partial least squares structural equation modeling (PLS-SEM) (see Figure 1). It is stated in the literature that the VIF value should be lower than 5 (Hair et al., 2017). No multicollinearity problems were found since the VIF values in our study were lower than this reference value (Table 3). Additionally, effect size and predictive power values were also calculated. These values, which meet the necessary criteria, are presented in Table 3. Finally, the SRMR value for the research model was found to be 0.042, supporting model fit due to the value being lower than 0.07 (Bagozzi & Yi, 2012).

Table 3. The research model results

Scales			VIF	f^2	Scales	R^2	Q^2
HoL	→	ERSB	3,584	0,178	HoL		
HoL	→	WE	1,000	2,584	WE	0,721	0,518
WE	→	ERSB	3,584	0,257	ERSB	0,741	0,545

Source: own calculation

The findings showing the direct and indirect relationships between the research variables are presented in Table 4.

Table 4. Findings on the direct and indirect (mediation) effects

Direct Effects	Path coefficient	S. D.	T Statistics	P Values	Status
HoL → ERSB	0,407	0,116	3,506	0,000	H1: Supported
HoL → WE	0,849	0,025	33,771	0,000	H2: Supported
WE → ERSB	0,488	0,122	3,987	0,000	H3: Supported
Indirect Effects					
HoL → WE → ERSB	0,415	0,110	3,785	0,000	H4: Supported

Note: The bootstrapping method was used (5000 subsamples).

Source: own calculation

The findings in Table 4 suggest that HoL positively and significantly effects extra-role service behavior (β= 0.407; p<0.05) and work engagement (β= 0.849; p<0.05). In addition to, work engagement positively and significantly effects extra-role service behavior (β= 0.488; p<0.05). Therefore, H1, H2 and H3 are supported. The mediator analysis steps of Zhao et al. (2010) were followed to test the mediation hypothesis (Table 4) revealing that HoL not only directly effected extra-role service behavior (β= 0.407; p<0.05), but also indirectly and significantly effected work engagement (β= 0.415; p<0.05). Therefore, H4 is supported.

4. Discussion and conclusion

The research examined the relationship between HoL and extra-role service behavior as well as testing work engagement's mediating role in this relationship. The findings showed that HoL effects extra-role service behavior both directly and indirectly through work engagement. Based on this, it can be stated that employees with a high perception of HoL are more engaged to their work and ultimately turn to service behaviors that are useful despite not being in the job description. The following theoretical and practical inferences were made taking the findings into consideration.

We focused our research on finding the answers to "Whether HoL has a positive contribution to the extra-role service behaviors of public employees" and "What role work engagement plays in the relationship between HoL and extra-role service behavior". A research model was created, and the hypotheses were tested based on these questions. There are few relevant studies in the field due to the fact that HoL is a new type of leadership. Within this context, the present study is expected to contribute to both the national and the international literature. Studies in the literature reveal that different leadership styles positively effect extra-role service behavior (Kerse, 2021; Srivastava & Dhar, 2019; Gill & Mathur, 2007; Aboramadan et al., 2022). However, no studies addressing HoL's effect on extra-role service behavior were found. Our research presents HoL as a new precursor of extra-role service behavior in an attempt to alleviate this scarcity. Therefore, our findings revealed that health-oriented leadership positively effects extra-role service behavior. This result is similar to other findings suggesting that leadership types have a positive effect on extra-role service behavior (Kerse, 2021; Srivastava & Dhar, 2019; Gill & Mathur, 2007; Aboramadan et al., 2022).

Our findings also showed that HoL contributes to the organization by going beyond the formal role descriptions of public employees, who have a critical role in solving many social problems. Therefore, the findings indicate that public organizations having managers who focus on health leads to positive outcomes for both the employees and society. Furthermore, our findings supported the findings of other studies that addressed the relationships between HoL and work engagement by showing that HoL positively effects work engagement (Grimm et al., 2021; Liu et al., 2022).

Researchers have proven that engagement has a mediating role between some types of leadership and various variables (Chan, 2019; Babcock-Roberson and Strickland, 2010; Lai et al., 2020). However, this research revealed for the first time that engagement plays a mediating role in the relationship between HoL and extra-role service behavior. Our research has contributed to the relevant field in this regard as well.

Health is an important resource that allows employees to continue their work (Jimenez, 2017). Therefore, identifying the variables that can improve this resource will be beneficial for practitioners. Employees' perceptions of health both directly and indirectly affect their levels of work engagement. Pressures such as excessive workload, role conflict, and stress can psychologically frustrate employees, which can negatively affect their engagement levels (Liu et al., 2022). Health-oriented leaders can alleviate these pressures through some improvements and ensure that they are engaged to their work (Jimenez et al., 2017). A health-focused leader can help maintain a healthy workforce by helping employees maintain their health while also allowing them to be more engaged by giving them the opportunity to improve their health. Employees with increased levels of engagement can be expected to go beyond their officially defined duties and make more effort for the success of the organization.

Although our research is thought to make contributions to the literature, it also has certain limitations. First of all, the fact that the research sample consisted only of public employees restricted the comparability of the findings in terms of private sector employees.

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

Additionally, the fact that the sample was selected from a single province in Turkey makes it non-viable to generalize the study's findings. Furthermore, the data belongs to an extraordinary period of time, due to the fact that it was collected remotely during a pandemic under the psychological conditions that this situation would cause. On the other hand, the research used a model regarding only simple mediation while ignoring variables that could indicate a moderating effect. Therefore, future studies on the subject can take these into consideration and develop research models with mediator and moderator variables.

References

Aboramadan, M., Hamid, Z., Kundi, Y. M., & El Hamalawi, E. (2022). The effect of servant leadership on employees' extra-role behaviors in NPOs: The role of work engagement. *Nonprofit Management and Leadership*, 1–21. https://doi.org/10.1002/nml.21505

Arnold, M., & Rigotti, T. (2020). Is it getting better or worse? Health-oriented leadership and psychological capital as resources for sustained health in newcomers. *Applied Psychology: An International Review*, *70*(2), 1–29. https://doi.org/10.1111/apps.12248

Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of Psychology*, *144*(3), 313-326. https://doi.org/10.1080/00223981003648336

Bagozzi, R. P. & Yi, Y. (2012). Specification, evaluation and interpretation of structural equation models. *Journal of Academy of Marketing Science, 40*(1), 8-34. http://dx.doi.org/10.1007/s11747-011-0278-x

Bakker, A. B. (2015). A Job Demands–Resources Approach to Public Service Motivation. *Public Administration Review*, *75*(5), 723–32. https://doi.org/10.1111/puar.12388

Bencsik, A., & Juhasz, T. (2023). Impact of technostress on work-life balance. *Human Technology*, 19(1), 41–61. https://doi.org/10.14254/1795-6889.2023.19-1.4

Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, *73*(1), 39-61. https://doi.org/10.1016/S0022-4359(97)90014-2

Bilan, Y., Mishchuk H., & Samoliuk N. (2023). Digital skills of civil servants: Assessing readiness for successful interaction in e-society. *Acta Polytechnica Hungarica*, 20(3), 155-174.

Bove, L. L., Pervan, S. J., Beatty, S. E., & Shiu, E. (2009). Service worker role in encouraging customer organizational citizenship behaviors. *Journal of Business Research*, *62*(7), 698-705. https://doi.org/10.1016/j.jbusres.2008.07.003

Bregenzer A., Milfelner, B., Žižek S. Š., & Jiménez P., (2020). Health-promoting leadership and leaders' listening skills have an impact on the employees' job satisfaction and turnover intention. *International Journal of Business Communication*, 1-20. https://doi.org/10.1177/2329488420963

Chan, S. C. (2019). Participative leadership and job satisfaction: The mediating role of work engagement and the moderating role of fun experienced at work. *Leadership & Organization Development Journal*, *40*(3), 319-333. https://doi.org/10.1108/LODJ-06-2018-0215

Demerouti, E., Bakker, A. B., & Gevers, J. M. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior, 91*, 87–96. https://doi.org/10.1016/j.jvb.2015.09.001

Efimov, I., Harth, V., & Mache, S. (2020). Health-oriented self- and employee leadership in virtual teams: A qualitative study with virtual leaders. *International Journal of Environmental Research and Public Health*, *17*(18), 6519. 10.3390/ijerph17186519

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

Fındıklı, M. M. A. (2015). Exploring the consequences of work engagement: Relations among OCB-I, LMX and team work performance. *Ege Akademik Bakış*, *15*(2), 229-238.

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39-50.

Franke, F., & Felfe, J. (2011). *Diagnose gesundheitsforderlicher fiihrung - das instrument health-oriented leadership*. In B. Badura, A. Ducki, H. Schroder, J. Klose, & K. Macco (Hrsg.), *Fehlzeiten-Report 2011* (ss. 3-13). Heidelberg: Springer.

Franke, F., Felfe, J., & Pundt, A. (2014). The impact of health-oriented leadership on follower health: Development and test of a new instrument measuring health-promoting leadership. *German Journal of Research in Human Resource Management, 28*(1-2), 139-161. https://doi.org/10.1177/239700221402800108

Gill, A. S., & Mathur, N. (2007). Improving employee dedication and pro-social behavior. *International Journal of Contemporary Hospitality Management, 19*(4), 328-334. https://doi.org/10.1108/09596110710747661

Gurt, J., Schwennen, C., & Elke, G. (2011). Health-specific leadership: Is there an association between leader consideration for the health of employees and their strain and well-being? *Work & Stress*, *25*(2), 108–127. https://doi.org/10.1080/02678373.2011.595947

Güler, M., Çetin, F. ve Basım, H. N. (2019). The validity and reliability study of Work Engagement Ultra Short Version (UWES-3) proposal of an alternative version (UWES-6). *The Journal of Human and Work, 6*(2), 189-197. https://doi.org/10.18394/iid.516921

Grimm L. A, Bauer G. F, Jenny G. J. (2021). Is the health-awareness of leaders related to the working conditions, engagement, and exhaustion in their teams? A multi-level mediation study. *BMC Public Health*, *1*, 1935. https://doi:10.1186/s12889-021-11985-1.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. USA: Sage publications.

Henseler, J., Ringle, C. M. & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of The Academy of Marketing Science*, *43*(1), 115-135. https://doi:10.1007/s11747-014-0403-8

Hobfoll, S. E. (2001). The influence of culture, community, and the nest-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337-421. https://doi.org/10.1111/1464-0597.00062

Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, *5*, 103-128. https://doi.org/10.1146/annurev-orgpsych-032117-104640

Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*, 513–524. https://doi.org/10.1037//0003-066x.44.3.513

Horstmann, D. (2018). Enhancing employee self-care: the moderating effect of personal initiative on health-specific leadership. *European Journal of Health Psychology*, *25*, 96-106. https://doi.org/10.1027/2512-8442/a000014

Jiménez, P., Bregenzer, A., Kallus, K.W., Fruhwirth, B., & Wagner-Hartl, V. (2017). Enhancing resources at the workplace with health-promoting leadership. *International Journal of Environmental Research and Public Health,* 14, 1264. https://doi.org/10.3390/ijerph14101264.

Jiménez, P., Winkler, B., & Dunkl, A. (2013, May). *Health relevant leadership dimensions. Development of a questionnaire to measure healthy leadership*. Poster presented at the 16th Congress of the European Association of Work and Organizational Psychology, Münster.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692-724. https://doi.org/10.5465/256287

Kaluza, A. J., & Junker, N. M. (2022). Caring for yourself and for others: team health climate and self-care explain the relationship between health-oriented leadership and exhaustion. *Journal of Managerial Psychology*, https://doi.org/10.1108/JMP-10-2021-0567.

Karatepe, O. M. (2015). The effects of family support and work engagement on organizationally valued job outcomes. *Tourism*, *63*(4), 447–464. https://doi.org/10.1037/t35249-000

Kataria, A., Garg, P. ve Rastogi, R. (2013). Work engagement in India: Validation of the Utrecht Work Engagement. *Asia-Pasific Journal of Management Research and Innovation*, *9*(3), 249-260. https://doi.org/10.1177/2319510X135193

Kerse G (2021). A leader indeed is a leader in deed: The relationship of ethical leadership, person–organization fit, organizational trust, and extra-role service behavior. *Journal of Management & Organization*, *27*, 601–620. https://doi.org/10.1017/jmo.2019.4

Kerse G., Soyalın M. & Özdemir Ş. (2021). Turkish adaptation of the health-oriented leadership scale and effect of healthoriented leadership on emotional exhaustion: The mediating role of psychological resilience. *Journal of Social Sciences of Mus Alparslan University*, *9*(6), 1799-1818. http://dx.doi.org/10.18506/anemon.975341.

Knezevic, D. (2023). The impact of technologies on leadership styles in Southeast European counties. *Journal of International Studies, 16*(2), 127-139. doi:10.14254/2071-8330.2023/16-2/8

Klug, K., Felfe, J., & Krick, A. (2019). Caring for oneself or for others? How consistent and ınconsistent profiles of health-oriented leadership are related to follower strain and health. *Frontiers in Psychology*, 10, 1-15. https://doi.org/10.3389/fpsyg.2019.02456

Lai, F. Y., Tang, H. C., Lu, S. C., Lee, Y.C. & Lin, C. C. (2020). Transformational leadership and job performance: The mediating role of work engagement. *SAGE Open*, *10*(1), 1-11. https://doi.org/10.1177/2158244019899085.

Liu, N. T., Chen S. C. & Lee ,W. C. (2022). How does moral identity promote employee voice behavior? The roles of work engagement and leader secure-base support, *Ethics & Behavior , 32*, 449-467. https://doi.org/10.1080/10508422.2021.1923498

Maslach, C. & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.

Mishchuk, H., Bilan, Y. & Mishchuk, V. (2023). Employment risks under the conditions of the COVID-19 pandemic and their impact on changes in economic behaviour. *Entrepreneurial Business and Economics Review,* 11(2), 201-216. https://doi.org/10.15678/EBER.2023.110211.

Mo, S., & Shi, J. (2017). Linking ethical leadership to employees' organizational citizenship behavior: Testing the multilevel mediation role of organizational concern. *Journal of Business Ethics*, *141*(1), 151-162. https://doi.org/10.1007/s10551-015-2734-x

Napolitano, A. (2016). Maximizing employee engagement in the public sector. https://www.govloop.com/community/blog/maximizing-employee-engagement-public-sector/.

Orlowski, M., Bufquin, D., & Nalley, M. E. (2021). The influence of social perceptions on restaurant employee work engagement and extra-role customer service behavior: A moderated mediation model. *Cornell Hospitality Quarterly, 62*(2), 261-275. https://doi.org/10.1177/1938965520910119

Park, Y. K., Song, J. H., Yoon, S. W., & Kim, J. (2014). Learning organization and innovative behavior: The mediating effect of work engagement. *European Journal of Training and Development*, 38 (1/2), 75-94. https://doi.org/10.1108/EJTD-04-2013-0040

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

Pundt, F., & Felfe, J. (2017). *HoL - Health oriented leadership*. Göttingen: Hogrefe.

Purwanto, A., Purba, J. T., Bernarto, I., & Sijabat, R. (2021). Effect of transformational leadership, job satisfaction, and organizational commitments on organizational citizenship behavior. *Inovbiz: Jurnal Inovasi Bisnis, 9*(1), 61-69. https://doi:10.35314/inovbiz.v9i1.1801

Santa Maria, A., Wolter, C., Gusy, B., Kleiber, D., & Renneberg, B. (2019). The impactofhealth-oriented leadership onpolice officers'physical health, burnout, depression and well-being. *Policing, 13*, 186–200. https://doi:10.1093/police/pay067

Sarihasan, I., Dajnoki, K., Oláh, J., & Al-Dalahmeh, M. (2022). The importance of the leadership functions of a high-reliability health care organization in managing the COVID-19 pandemic in Turkey. *Economics and Sociology*, *15*(1), 78-93. doi:10.14254/2071-789X.2022/15-1/5

Sazzad, F., Rajan, V.P. and Demircioglu, M.A. (2021). The role of leadership in public sector innovation: A systematic review and meta-analysis of the management of COVID-19 in Asian Countries. Front. *Public Health, 9*, 743748. https://doi:10.3389/fpubh.2021.743748

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. https://doi:10.1002/JOB.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716. https://doi.org/10.1177/0013164405282471

Schaufeli, W. B. (2012). Work engagement. What do we know and where do we go?. *Romanian Journal of Applied Psychology*, *14*(1), 3-10.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V. and Bakker, A.B. (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*, 71-92. https://doi.org/10.1023/A:1015630930326

Shin, Y., & Hur, W. M. (2021). Do organizational health climates and leader health mindsets enhance employees' work engagement and job crafting amid the pandemic?. *International Journal of Environmental Research and Public Health*, *18*(22), 12123. https://doi.org/10.3390/ijerph182212123

Shokory, S. M., & Suradi, N. R. M. (2018). Transformational leadership and its impact on extra-role performance of project team members: The mediating role of work engagement. *Academy of Strategic Management Journal*, *17*(5), 1-6.

Srivastava, A. P., & Dhar, R. L. (2019). Authentic leadership and extra role behavior: A school based integrated model. *Current Psychology*, *38*(3), 684-697. https://10.1007/s12144-017-9634-4

Stuber F., Seifried-Dübon T., Rieger M. A., Gündel H., Ruhle S., Zipfel S., & Junne F. (2021). The effectiveness of health-oriented leadership interventions for the improvement of mental health of employees in the health care sector: a systematic review. *International Archives of Occupational and Environmental Health*, *94*(2), 203-220. https://doi: 10.1007/s00420-020-01583-w.

Van Dyne Linn, Cummings L.L. & Parks Judi McLean (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). *Research in Organizational Behavior*, *17*, 215-285.

Winiarski, S., Molek-Winiarska, D., Chomątowska, B., Sipko, T., & Dyvak, M. (2021). Added value of motion capture technology for occupational health and safety innovations. *Human Technology*, 17(3), 235–260. https://doi.org/10.14254/1795-6889.2021.17-3.4

Gökhan Kerse, Şefik Özdemir,
Mesut Soyalın

INTERDISCIPLINARY APPROACH TO ECONOMICS AND SOCIOLOGY

Zhao, X., Lynch, J. G. & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research Inc., 37*(2), 197-206. https://doi.org/10.1086/651257