



ANALYZING THE IMPACT OF LEADER MEMBER EXCHANGE ON EMPLOYEE VOICE: THE SCHOOL PRINCIPAL AS A LEADER AND THE TEACHER AS A MEMBERⁱ

Muhammed Gürler¹ⁱⁱ,

Yücel Şimşek²

¹Ministry of National Education,
Turkey

²Faculty of Education, Anadolu University,
Turkey

Abstract:

The aim of the present study is to investigate the impact of leader member exchange on employee voice according to the views of the teachers. The sample of the study consisted of 713 teachers randomly selected at 40 public schools from kindergarten to high school from Ayaş, Beypazarı, Güdül and Sincan districts of Ankara province in Turkey. In order to collect the data for this study, Leader-Member Exchange Scale and Employee Voice Scale were administered. All scales were adapted to the school context by translation and back translation method. The construct validity and reliability of the scales were examined through EFA, CFA, Cronbach Alfa, CR, AVE values. In the first step of the data analysis process; arithmetic means, standard deviations, skewness and kurtosis values were calculated. Relations between the variables were measured by the Pearson product-moment correlation coefficient (PPMCC) and regression analysis. The results of study indicate that there was a positive and significant relationship between leader member exchange and employee voice. On the other hand, leader member exchange is a significant predictor for employee voice. The findings of the study exhibit the level of teachers' leader member exchange is moderate degree and the level of teachers' employee voice is high degree.

Keywords: teachers, school principals, leader member exchange, employee voice

ⁱ This article is derived from Muhammed Gürler's PhD dissertation entitled "Analyzing the Mediating Effect of Employee Voice in the Relationship between the Teachers' Leader Member Exchange and Work Engagement", conducted under the supervision of Yücel Şimşek at Anadolu University, Graduate School of Educational Sciences in June, 2018 in Eskişehir, Turkey.

¹ Correspondence: email muhammedgurler@hotmail.com

1. Introduction

In today's chaotic world, leaders and employees in the organizations had better work harmoniously with each other to stand on their own feet and achieve their goals successfully. In this process, organizations need employees in order to carry out the organizational activities effectively. Besides, leaders and leadership for the coordination and cooperation of the employees and organizations are described as a must. In spite of the fact that leadership process is the leader's endeavour to influence the members, it is also members' attempts to influence the leaders in the organizations (Bandura, 1977). In traditional leadership theories the interactions and relationships between the leader and members are ignored and all the characteristics, qualities and performance levels of the members are assumed one and the same. In this regard, leader member exchange is an epochal leadership theory, which attracts a great deal of attention to the different dyadic relationships between leaders and members and propounds that leaders have unique relationships with every employee in the organizations (Dulebohn et al., 2012).

It is no more possible by top management to handle the work issues easily and find solutions about them in this day and age (Senge, 1990). Managers at today's complicated and rapidly changing business environment usually face harder situations and problematic issues to find solutions both at work and for data processing procedures (Hsiung, 2012). Therefore, top managers need valuable information to give the right decisions, solve the work issues without getting bigger and harder and respond to the requirements of the dynamic conditions of the work life. Employees are seen as the best source of exact and reliable information at organizational processes. That is why managers need subordinates to obtain this valuable information; otherwise they cannot be informed about them readily (Morrison, 2011). Thus, employees that take part in every step of the organizational activities may reveal the effects which lead to the organizational behaviour (Clapham and Cooper, 2005).

Morrison (2011) defined employee voice as stating of employees' ideas, feelings, concerns and suggestions about work issues voluntarily for those concerned in order to whip their work unit or organization into shape. Morrison and Milliken (2000) also emphasized that employees show positive attitudes towards their organizations by voicing their personal views. Moreover, voice improves employees' job satisfaction and motivation (Greenberger and Strasser, 1986; Parker, 1993). Van Dyne and LePine (1998) indicated that employees strive for extra roles at work by showing more voice behaviour. Detert and Burris (2007) also added that employee voice behaviour will be enhanced if it is listened closely and considered important by the leaders, otherwise it will decrease gradually and will damage the organization. Van Dyne, Kamdar and Joineman (2008) stated that high quality leader member exchange relationship can increase the level of employee voice. On the contrary, low quality leader member exchange relationship can decrease the level of employee voice.

When leader member exchange and employee voice literature are investigated, it can be seen a close relationship between these two variables. Ashford, Sutcliffe and Christianson (2009) expressed that leaders are key determinant to enhance the

employee voice or not. Burris, Detert, and Chiaburu (2008) underlined that high quality leader member exchange has a positive effect upon employee voice and also having low quality leader member exchange relationship with the employees causes negative and inefficient employee voice behaviour (Frazier, 2009); Edmondson (2003) stated that leader's attitudes to the employees are of vital importance for employee voice. In addition, if the leaders encourage the employees to speak up and remove the obstacles that prevent the voice in the organizations, employee voice behaviour will improve and go up.

To conclude, the relationship between leader member exchange and employee voice can influence the people in the organizations significantly. For this reason, the relationship between these two variables will be discussed and investigated in this research.

2. Literature Review

2.1 Leader Member Exchange

In the early leadership theories, leaders' behaviours to the employees and the employees' perceptions, comments and reactions were supposed homogeneous and identical (Danserau, Graen and Haga, 1975). However, leaders have different relationships with every member in the organizations. Therefore, the leadership researches should also focus on the exchange and interactions between the leaders and the members (Liden ve Maslyn, 1998; Scandura, 1999).

Leadership begins with the coming together of the leader and member (Yammarino and Danserau, 2008). Leaders and members struggle to influence each other during this leadership process (Bandura, 1977). Graen and Uhl-Bien (1995) defined that leadership is a mutual and complex structure, which involves leader, follower and the relationships between them. For this reason, researchers must scrutinize carefully these three elements.

Danserau, Graen and Haga (1975) established the vertical dyad linkage theory that is based on the dyadic relationships between the leaders and the members. This two-way (dyadic) relationship theory formed a basis for leader member exchange theory (Graen ve Uhl-Bien, 1995). Danserau, Graen and Haga (1975) stated that the relationships between the leaders and the subordinates come into existence as "in-group" and "out-group" members through informal relationships in the organizations. The member will be named as "in-group" if he/she has a qualified relationship with the leader in the point of sharing common interests. In addition, in-group employee will also be a member of the leader's informal group on exchanging information and helping each other. On the other side, the member will be named as "out-group" if he/she has an unqualified relationship, a low rapport and sharing with the leader. For these reasons, out-group employee will probably be disapproved by in-group employees. In-group members are chosen by the leaders according to their abilities, skills, reliabilities and motives whether to take more responsibilities or not in the organizations, furthermore, these members take more responsibilities apart from their

official duties and make contribution to accomplish the critical affairs at work. They receive more attention, support and sensitivity from their leaders in return. On the other hand, out-group members' deal with ordinary and common affairs at work and also their relationships with the leaders continue albeit at a diminishing pace formally. The vertical dyad linkage theory turned into leader member exchange theory in time, moreover, the theory focused on the quality of the leader member exchange as high or low instead of naming the members in-group or out-group members (Liden and Graen, 1980).

Scandura, Graen and Novak (1986) explained leader member exchange theory in detail. According to the researchers:

- a) Leader member exchange theory is a system that involves parts and the relationships between these parts.
- b) It is a mutual relationship and includes both leader and member.
- c) The behaviours of both sides depend on each other.
- d) Both sides put up with the consequences in a body and either they win or lose together.
- e) Leader member exchange theory may reveal some results in the organizations like developing methods to understand the different situations, finding solutions for various incomprehensible issues, acquiring invaluable products and services.

Employees' perceptions of the leader member exchange are positively related to satisfaction with the leader, organizational citizenship behaviour, job performance, job satisfaction and work commitment, but then it is negatively related to situations such as current employee turnover rate, employees' intention to leave, role ambiguity and role conflict (Dulebohn et al., 2012).

2.2 Employee Voice

The American economist Hirschman's (1970) most influential book "Exit, Voice, and Loyalty" is agreed as the turning point of employee voice. However, the roots of employee voice go back to the industrial revolution (Kaufman, 2013). Hirschman (1970) explained that deterioration in the organizations and decline in performances will make worse the quality of the products and services in the organizations. Managers in the organizations will subsequently find out these failures in two ways. He called these ways "exit" and "voice". If the first way "exit" is selected by customers or employees, the customers will stop buying the products and employees will quit their jobs as a reaction. If the second way "voice" is selected by customers or employees, they will stay in their organizations, but express their dissatisfactions about work related issues to their managements, authorities or even the third person who will be willing to pay close attention to their dissatisfactions. Thus, it will be compulsory by the managements to investigate the issues that make the employees and customers feel dissatisfied and find cure for them (Hirschman, 1970).

Later on two more factors were added to Hirschman's model (Saunders et al., 1992). These factors are "responsiveness" and "approachability". The researchers implied that the employees will use voice much more when they perceive their leaders

as a responsive and approachable. On the other hand, they will use voice less if they are concerned about to approach their leaders as a member and they don't know their leaders' reactions and retaliations.

Van Dyne, Cummings and Mclean (1995) described voice as an extra role or non-compulsory work that employees perform at work of their own free will. Moreover, a behaviour is named as an extra role if it is done willingly, pro bono and perceived positive behaviour by the others at work. Researchers claimed that these supporting and compelling roles at work challenge the status quo in the organizations and advise constructive recommendations for change in the organizations.

Van Dyne and LePine (1998) defined that voice is sharing employees' opinions about work or organizations to improve or recover the current situation even the others object to it. It is also making innovative recommendations to make better the current procedures at work. Premaux and Bedeian (2003) also identified voice as speaking up of the employees about work related issues. These issues may be about others opinions and actions or necessary changes and alternative approaches at work.

Voice provides many beneficial gains for the organizations such as better organizational decision making, finding root causes of the problems about organization (Morrison and Milliken, 2000); increasing organizational learning (Argyris and Schon, 1978); and organizational innovation (Nemeth, 1985).

3. Methods

3.1 Research Design

In this study, relational screening model was used to analyze the impact of leader member exchange on employee voice. The relational screening model is suitable for the researches, which aim for describing a condition in the past or present as it is. Additionally, it is appropriate for indicating the covariances between the two or more variables (Karasar, 2006).

3.2 Research Sample

The sample of the research consisted of 713 teachers employed at 40 public schools (kindergarten, primary, secondary, high schools) from Ayaş, Beypazarı, Güdül and Sincan districts of Ankara, Turkey. Some demographic features of the participants can be seen in Table 1:

Table 1: Demographic Features of the Teachers

	Demographic Variables	n	%
Gender	Female	198	27.8
	Male	515	72.2
Tenure	1-10 year	293	41.1
	11-20 year	280	39.3
	21 year and over	140	19.6

3.3 Research Instruments

In order to gather data for this study, two measurement instruments were used. These scales are Leader-Member Exchange and Employee Voice Scale.

A. Leader-Member Exchange Scale

This scale developed by Janssen and Van Yperen (2004) was used for indicating the quality of leader and member relationships. It was translated into Turkish and adapted to the school context by Gürler (2018). It consists of 7 items in the form of 5-point Likert-type scale, which ranked between 1 (very low) and 5 (very high) for the Turkish context in this present study. However, it was originally designed as 7-point Likert-type.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) test and Bartlett's test of sphericity were used to examine the appropriateness of factor analysis. KMO was found to be .94 above the threshold level .50 (Tabachnick and Fidell 2007) and Bartlett's Sphericity Test was statistically significant $\chi^2(21) = 4456.349$, $p < .001$. Consequently, the quantity of the sample is "perfectly" adequate for factor analysis (Hutcheson and Sofroniou, 1999). According to the results obtained from the analyses, a single factor structure with an eigenvalue $\lambda = 5,346$ was extracted.

The internal consistency reliability of the scale was measured by using Cronbach's alpha and Composite Reliability (CR). The Cronbach's Alpha value of the Turkish adapted scale is .95 and composite reliability is .94. Both values are above the critical value .70 (Nunnally and Bernstein, 1994). The scale can be considered as a reliable tool to measure leader member exchange. In addition to reliability, corrected items total correlation coefficients ranged between .78 and .89. Factor load values of the items varied between .83 and .92 as well as the total variance with a single factor explained is around 76%.

To verify the construct validity, convergent and discriminant validity were measured. Average Variance Extracted (AVE) and factor loadings must be over .50 for convergent validity (Fornel and Larcker, 1981; Peterson, 2000). Calculated AVE is .73 and factor loading is .76. Both values are above the threshold level that means scale has convergent validity. To establish the discriminant validity, the correlations between the variables and square root of AVE were used. The square root of AVE cannot be lower than .50 and the correlation values of the other variables (Fornel and Larcker, 1981). The square root of AVE is .85 and higher than the correlation value of the employee voice ($r = .50$). As a result, it is evident that the scale has discriminant validity.

Whether the construct that obtained from exploratory factor analysis (EFA) is convenient or not with the research data, the confirmatory factor analysis (CFA) was implemented. CFA was applied by using AMOS 24 software program. Table 2 exhibits that the required and good levels of fit indices of the leader-member exchange scale, which were acquired through the confirmatory factor analysis.

Table 2: Goodness-of-Fit Indices for Leader Member Exchange

The Fit Indices	Acceptable Fit
$\chi^2/sd = 4.708$	< 5
GFI = .976	> .90
AGFI = .952	> .90
CFI = .988	> .90
NFI = .985	> .90
RMSEA = .072	< .08
RMR = .019	< .08
SRMR = .0165	< .05

After doing confirmatory factor analysis, *t* values of the items were analyzed. If the *t* value is over 1.96, ($p < .05$) or 2.58, ($p < .01$), It is statistically significant (Jöreskog and Sörbom, 1993; Kline, 2011). *t* values, which aren't significant must be discarded from the model or the number of the participants in the research aren't adequate and should be increased (Byrne, 2010).

In Table 3, standardized regression coefficients, standard errors, *t* and R^2 values are exhibited that derived from path analysis of leader member exchange.

Table 3: Results of Confirmatory Factor Analysis for Leader Member Exchange

Path from LMX to	Standardized Regression Coefficients	Standard Error	<i>t</i> value	p	R^2
LMX 1	.83				.69
LMX 2	.86	.04	28.4	*	.74
LMX 3	.80	.04	25.6	*	.64
LMX 4	.87	.04	29.0	*	.76
LMX 5	.91	.03	31.34	*	.83
LMX 6	.88	.04	29.4	*	.77
LMX 7	.82	.04	26.2	*	.67

* $p < 0.001$

As seen in Table 3, all *t* values are over 1.96 ($t > 1.96$) and statistically significant ($p < 0.001$). It means that the number of the participants in the research are adequate and there is no need to discard any items from the leader member exchange scale. Besides, according to the data derived from regression analysis results, the fifth item of the Leader member exchange is the most explanatory item in the scale ($R^2 = .83$).

B. Employee voice scale

This scale developed by Van Dyne and LePine (1998), translated into Turkish and adapted to the teachers and school context by Gürler (2018). It involves 7 items in the form of 5-point Likert-type scale, which ranked between 1 (I completely disagree) and 5 (I completely agree). Although, it was originally designed as 7-point Likert-type with 6 items. In this present study, the sixth item of the original scale divided into two separate items to be comprehended easily in Turkish context.

KMO was found to be .84 and Barlett's Sphericity Test was statistically significant $\chi^2(21) = 1971.946$, $p < .001$. According to the findings, a single factor structure with an eigenvalue $\lambda = 3.720$ was extracted from the employee voice scale.

The Cronbach's Alpha value of the Turkish adapted scale is .85 and composite reliability is .87. Corrected items total correlation coefficients ranged between .56 and .71. Factor load values of the items varied between .69 and .81 as well as the total variance with a single factor explained is around 53%. Explained variance value should be at least 30% for scales with a single factor (Büyüköztürk, 2003). For that reason, this value can be evaluated as acceptable and adequate for doing analysis.

Calculated AVE is .44 and factor loading is .53. It is observed that AVE of the scale is lower than the threshold level .50. In this case, Fornel and Larcker (1981) drew attention to the CR value of the scale to evaluate whether it has convergent validity or not. They implied that the scale will have convergent validity, if the CR value is .60 or over. In this sense, CR of the employee voice scale is .87 and it is apparent that the scale has convergent validity. The scale has also discriminant validity, too. This is because the square root of AVE is .66 and higher than the correlation value ($r = .50$).

In Table 4 fit indices of the employee voice scale were presented and the results indicated that good and acceptable levels of fit indices of the scale.

Table 4: Goodness-of-Fit Indices for Employee Voice

The Fit Indices	Acceptable Fit
$\chi^2/sd = 4.099$	< 5
GFI = .985	> .90
AGFI = .957	> .90
CFI = .984	> .90
NFI = .979	> .90
RMSEA = .066	< .08
RMR = .022	< .08
SRMR = .0275	< .05

In Table 5, standardized regression coefficients, standard errors, t and R^2 values are presented and as it is seen from the results, all t values are over 1.96 ($t > 1.96$) and statistically significant ($p < 0.001$). On the other side, the first item of the employee voice is the most explanatory item in the scale ($R^2 = .57$).

Table 5: Results of Confirmatory Factor Analysis for Employee Voice

Path from Employee Voice to	Standardized Regression Coefficients	Standard Error	t value	P	R^2
Emp.Voice1	.75				.567
Emp. Voice2	.59	.050	13.975	*	.353
Emp. Voice3	.52	.043	12.312	*	.270
Emp. Voice4	.60	.042	14.105	*	.360
Emp. Voice5	.73	.053	14.854	*	.538
Emp. Voice6	.73	.057	16.185	*	.526
Emp. Voice7	.67	.057	15.123	*	.447

* $p < .001$

3.4 Data Analysis

Data analysis was implemented in two stages. Firstly, the research data are made prepared to analyze and secondly the analyses towards the research were applied by using SPSS 24 software program.

Firstly, in order to check the dataset is modelled for normal distribution “skewness and kurtosis” values were calculated. Because normal distribution is necessary before performing statistical tests for dataset. If the data isn’t normally distributed, the results of the statistical tests can be erroneous and missing (Kalaycı, 2006). After testing the normality, descriptive statistics (minimum, maximum values, mean, standard deviation, skewness, kurtosis, frequency distribution, and percentage values) were performed to measure the levels of the teachers’ leader member exchange and employee voice. Then, the Pearson product-moment correlation coefficient (PPMCC) was measured if the relationship between two variables is statistically significant or not. Finally, regression analysis was used for revealing whether leader member exchange predicts employee voice significantly or not.

4. Findings

Table 6 exhibits mean, standard deviation, skewness and kurtosis values for leader member exchange (LMX) and employee voice.

Table 6: Mean, Standard Deviation, Skewness and Kurtosis Values of the Variables

Variables	N	\bar{X}	S	Skewness	Kurtosis
Leader Member Exchange	713	3.27	0,93	-.28	-.22
Employee Voice	713	3.79	0,66	-.38	.14

As it is seen in Table 6, for leader member exchange “mean” found as =3.27, which refers to moderate degree, “mean” for employee voice as =3.79, which refers to high degree. Results showed that leader member exchange (S=.93) is more homogenous distribution than employee voice (S =.50). Considering the measured values of “skewness and kurtosis” for the variables, the values are between the range of +1.5 and -1.5 (Tabachnick and Fidell, 2013). Therefore, it may be implied that the dataset for the variables has normality assumption.

In Table 7 the results from the correlation analysis directed to determine the relationship between leader member exchange and employee voice are shown:

Table 7: Correlation between LMX and Employee Voice

Variables	1	2
Leader Member Exchange	1	.50*
Employee Voice		1

* p<.01; N=713

As represented in Table 7, the relationship between leader member exchange and employee voice is ($r = .50, p < .01$). Findings reveal that there is a significant and positive relationship between two variables.

Results of the regression analysis concerning the prediction of employee voice by leader member exchange as a predictor is presented in Table 8:

Table 8: Results of the Regression Analysis Concerning the Prediction for Employee Voice by Leader Member Exchange as a Predictor

Variables	B	SE	β	t	p
Constant	2.644	.078		33.905	.01*
Leader Member Exchange	.352	.023	.500	15.387	.01*
R				.500	
R ²				.250	
F				236.760	.01*

* $p < .01$;

Predictor: Leader Member Exchange

A review of Table 8 shows that leader member exchange has a positive and significant relation with the employee voice ($R = .500; R^2 = .250, p < .01$). In other words, leader member exchange is a significant predictor of employee voice.

5. Conclusion and Discussion

This research determined to analyze the relationships between leader member exchange and employee voice according to the teachers' opinions. As a result of the present study, a positive and significant relationship was discovered between leader member exchange and employee voice.

In this study, the results correspond to the findings of accessible prior studies in the literature. The present study found, similar to Botero and Van Dyne (2009), that there is a positive relationship between leader member exchange and employee voice. The results of both studies coincide with each other. The researchers implied that high-quality leader member exchange enhances voice. They also suggested that encouraging employees to voice will stimulate open communications at work. Furthermore; Van Dyne, Kamdar and Joineman (2008) stated that high quality leader member exchange advances and increases voice behavior by employees. Conversely, low quality leader member exchange will decrease voice behavior by employees. Edmondson (2003) implied that leaders' attitudes towards their employees play a crucial role in using voice behavior. Moreover, he also added that positive relations between leaders and employees at work will reveal high leader member exchange and this will promote employee voice such as voicing their thoughts, information, and beliefs about work developments. Ashford, Sutcliffe and Christianson (2009) indicated that leaders are the key persons for enhancing voice behavior at work, because they influence employees' decisions and psychology positively or negatively.

The present study demonstrated that if the school principals and teachers have high quality leader member exchange at schools, teachers will display more voice behavior. Çetin (2013) expressed that teachers show a higher level of voice about work issues at school if they think their school administrations attach importance to their contributions and take into account their welfare, opinions or suggestions. As a consequence, the findings of the both studies confirm each other.

This study also found that the level of leader member exchange at schools is medium and should be enhanced thoroughly. That is the reason why the school principals as a leader should make the effort to improve and maintain the good relationships and also high quality leader member exchange level with the teachers. Moreover, the managers should be more approachable and responsive to the employees. Additionally, the school principals should behave their teachers being more positive, respectful, supportive, sincere, humane, empathetic, trustworthy and honest. They should also spend much more time together.

Finally, it is suggested that more researches with other organizational variables on leader member exchange and employee voice should be applied to make these issues clearer in educational environments.

References

- Argyris, C. and Schön, D. (1978). *Organizational learning: A theory of action Perspective*. Reading, Mass: Addison Wesley.
- Ashford S.J., Sutcliffe K.M. and Christianson M.K. (2009). Speaking up and speaking out: the leadership dynamics of voice in organizations. *Voice and Silence in Organizations*, Edited by: Greenberg J., Edwards M., 175-202. Bingley, England: Emerald
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Botero, I.C. and Dyne, L.V. (2009). Employee voice behavior: interactive effects of lmx and power distance in the United States and Colombia. *Management Communication Quarterly*, 23-1, 84-104.
- Burriss, E.R., Detert, J.R. and Chiaburu, D.S. (2008). Quitting before leaving: the mediating effects of psychological attachment and detachment on voice. *Journal of Applied Psychology*, 93, 912-922.
- Büyüköztürk, Ş. (2003). *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem A.
- Byrne, B. (2010). *Structural equation modeling with AMOS: Basic concepts, applications and programming*. New York, NY: Taylor and Francis Group.
- Clapham, S.E. and Cooper, R.W. (2005). Factors of employees' effective voice in corporate governance. *Journal of Management and Governance*, 9/3-4, 287-313.
- Çetin, Ş. (2013). Impact of teachers' perceptions of organizational support, management openness and personality traits on voice. *Educational Research and Reviews*, 8-18, 1709-1721.

- Dansereau, F., Graen, G.B. and Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, 13, 46-78.
- Detert, J.R. and Burris, E.R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50-4, 869-884.
- Dulebohn, J.H., Bommer, W.H., Liden, R.C., Brouer, R.L. and Ferris, G.R. (2012). A Meta-analysis of antecedents and consequences of leader-member exchange: integrating the past with an eye toward the future. *Journal of Management*, 38-6, 1715-1759.
- Edmondson, A.C. (2003). Speaking up in the operating room: how team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40, 1419-1452.
- Fornell, C., and Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39-50.
- Frazier, M.L. (2009). *Voice climate in organizations: A group level examination of antecedents and performance outcomes*. Unpublished doctoral dissertation, Oklahoma: Graduate College of the Oklahoma State University.
- Graen, G.B. and Uhl-Bien, M. (1995). Relationship-based approach to leadership: development of leader-member exchange (lmx) theory of leadership over 25 years: applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6-2, 219-247.
- Greenberger, D.B. and Strasser, S. (1986). The development and application of a model of personal control in organizations. *Academy of Management Review*, 11, 164-177.
- Gürler, M. (2018). *Analyzing the mediating effect of employee voice in the relationship between the teachers' leader-member exchange and work engagement*. Unpublished doctoral dissertation, Eskişehir: Anadolu University, Graduate School of Educational Sciences.
- Hirschman, A.O. (1970). *Exit, voice, and loyalty, responses to decline in firms, organizations and states*. Cambridge, Massachusetts: Harvard University Press.
- Hsiung, C.M. (2012), The effectiveness of cooperative learning. *Journal of Engineering Education*, 101,119-137.
- Hutcheson, G.D. and Sofroniou, N. (1999). *The multivariate social scientist: An introduction to generalized linear models*. Thousand Oaks, California: Sage Publications.
- Janssen, O. and Van Yperen, N.W. (2004). Employees' goal orientations, the quality of leader-member exchange and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47-3, 368-384.
- Jöreskog, K.G., and Sörbom, D. (1993). *Lisrel 8: user's guide*. Chicago: Scientific Software.
- Kalaycı, Ş. (Ed.) (2006). *Spss uygulamalı çok değişkenli istatistik teknikleri*. Ankara: Asil Yayın Dağıtım.
- Karasar, N. (2006). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.

- Kaufman, B.E. (2013). Employee voice before Hirschman: its early history, conceptualization and practice. *Andrew Young School of Policy Studies Research Paper Series*,13-04.
- Kline, R.B. (2011). Principles and practice of structural equation modeling. New York: The Guilford Press.
- Liden, R., and Graen. G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23-3, 451-465.
- Liden, R.C. and Maslyn, J.M. (1998). Multidimensionality of leader-member exchange: an empirical assessment through scale development. *Journal of Management*, 24-1, 43-72.
- Morrison, E.F. and Milliken, F.J. (2000). Organizational silence: A barrier to change and development in a pluralistic academy of management. *The Academy of Management Review*, 25-4, 706-725.
- Morrison, E. W. (2011). Employee voice behavior: integration and directions for future research. *The Academy of Management Annals*, 5-1, 373-412.
- Nemeth, C.J. (1985). Dissent, group process, and creativity. *Advances in Group Processes*, 2, 57-75.
- Nunnally, J.C., and Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Parker, L.E. (1993). When to fix it and when to leave: relationships among perceived control, self-efficacy, dissent, and exit. *Journal of Applied Psychology*, 78, 949-959.
- Peterson, R. (2000). A meta-analysis of variance accounted for and factor loadings in exploratory factor analysis. *Marketing Letters*, 11, 261-275.
- Premeaux, S.F. and Bedeian, A.G. (2003). Breaking the silence: the moderating effects of self-monitoring in predicting speaking up in the workplace. *Journal of Management Studies*, 40, 1537-1562.
- Saunders, D.M., Sheppard, B.H., Knight, V. and Roth, J. (1992). Employee voice to supervisors. *Employee Responsibilities and Rights Journal*, 5-3, 241-259.
- Scandura, T.A., Graen, G.B. and Novak, M.A. (1986). When managers decide not to decide autocratically. *Journal of Applied Psychology*, 71, 106.
- Scandura, T.A. (1999). Rethinking leader-member exchange: An organizational justice perspective. *The Leadership Quarterly*, 10(1), 25-40.
- Senge, P.M. (1990). *The fifth discipline: the art and practice of the learning organization*. New York: Doubleday Business.
- Tabachnick, B.G., and Fidell, L.S. (2013). *Using Multivariate Statistics* (6th Ed.). Boston: Ma: Pearson.
- Van Dyne, L., Cummings, L.L. and Mclean, P.J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*, 17, 215.
- Van Dyne, L. and Lepine, J.A. (1998). Helping and voice extra-role behaviors: evidence of construct and predictive validity. *Academy of Management Journal*, 41-1, 108-119.

- Van Dyne, L., Kamdar, D., and Joireman, J. (2008). In role perceptions buffer the negative impact of low lmx on helping and enhance the positive impact of high lmx on voice. *Journal of Applied Psychology*, 93-6, 1195-1207.
- Yammarino, F. and Danserau, F. (2008). Multilevel nature and multilevel approaches to leadership. *The Leadership Quarterly*, 19, 135-141.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).