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The Effect of Organizational Justice and Organizational Commitment on Knowledge Sharing and Firm Performance

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Abstract

The human factor plays the most important role in maintaining the existence of organizations. Therefore, emotions, attitudes, motivations, and behaviors of the employees are critical for firms. Organizational commitment enables employees to fulfill their responsibilities with motivation and even voluntariness in line with the aims and objectives of the organization. For this reason, it is very important for firms to have employees with organizational commitment in terms of achieving organizational goals. One of the main determinants of organizational commitment is organizational justice. For employees, the operation of all the systems in the firm with justice is more important than many things in the organization. Employees' perceptions of organizational justice determine their positive or negative attitudes towards the organization and therefore in their organizational commitment. Namely, both organizational justice and organizational commitment are decisive for the employees to be useful for the organization, do useful things for the organization and work heartily. In this way, employees do not hesitate to share knowledge, on the contrary, they tend to share more knowledge in order to do their job better and support activities that add value to the firm. In addition, thanks to these positive emotions, attitudes, and behaviors of employees, higher performance will be inevitable for the firm. In this context, the purpose of this study is to investigate the relationships among organizational justice, organizational commitment, knowledge sharing, and firm performance. By using the survey data from a sample of 211 responses, our results suggest that organizational justice affects organizational commitment, knowledge sharing, and firm performance. Moreover, organizational commitment influences knowledge sharing and firm performance. It is also found that knowledge sharing affects firm performance.

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1. Introduction

Retention of employees is substantial for firms since if employees leave the workplace or want to leave it will be a cost for the firm not only in terms of financial cost but also in terms of loss of valuable knowledge, competences and

experience [1]. Because employees are the most valuable assets of firms, motivated, satisfied and loyal employees play a key role in the firm's market place and competitiveness [2]. Therefore, the employees' attitudes and behaviors towards the organization come at the top of the factors affecting the success of the company.

Fairness in the organization ensures that employees trust the organization and the processes in the organization [3]. Furthermore, justice perceptions of employees are determinative in the attitudes and behaviors of employees towards the organization [4]. Organizational commitment allows employees to continue to work in the organization and to make an effort to add value to the organization [5]. In this context, both organizational justice and organizational commitment enable companies to get the maximum benefit from their employees by providing an environment of harmony and cooperation within the organization. In this respect, employees with justice perceptions and loyalty tend to share the knowledge and expertise they have and thus organizational knowledge enhances. These make it possible for the organization to be more successful, gaining competitive advantage and attaining high performance. For these reasons, investigating and empirically explaining the relationship between organizational justice, organizational commitment, knowledge sharing, and firm performance makes an important contribution to the literature. Although there are several studies on these concepts, there is no comprehensive study that examines them all together. In addition, it is observed that generally the relation of sub-dimensions of these concepts with various concepts is investigated in previous studies. Therefore, there is a need for a comprehensive study that will eliminate the complexity related to the effects of these concepts and explain the relationship between each other in a clear and general framework. By taking mentioned needs into account, this paper aims to contribute to the literature by investigating these relationships.

This paper is organized as follows. Firstly, a review of related literature is presented. Later, there is a hypothesis development section. Research method and the results are given in section 4. Finally, discussion and conclusion are offered.

2. Literature Review

2.1. Organizational Justice

Justice as a term is generally used to express “righteousness” or “fairness” [6]. Because of the realization that fairness is an important issue to understand the employees' behaviors in organizations, it was got attention by organizational scholars and the concept of organizational justice was coined to understand and explain the role of fairness in an organizational manner [7]. In the management literature, the first studies which organizational justice stems from were started with Adams' equity theory, but it has attracted great interest especially after the 1990s [8]. Organizational justice is defined as employees' perceptions of fairness in the workplace [9]. More specifically, it is the evaluations of employees about the standing of managerial conduct in terms of morality and ethically [10]. Therefore, these perceptions directly affect employees' attitudes and behaviors [4].

Organizational justice comprises three interrelated subdimensions which are distributive, procedural and interactional justice [8]. Distributive justice is the perceived justice about the outcomes employees get [10]. In other words, distributive justice can be perceived by employees if employees are rewarded or punished for only what they are doing, and if everyone working at the same organization is treated equally for allocation of outcomes [11]. Procedural justice is the perceived justice about the process by which outcomes are determined [8]. In this regard, if employees participate in the process, they perceive fairness, though they are not satisfied with the result [12]. Interactional justice refers to the fairness of the interpersonal interaction in organizational processes [8]. Employees are likely to perceive interactional justice if their managers have a fair attitude and behavior toward them through processes [13].

2.2. Organizational Commitment

Commitment refers to a force that allows an individual to act for some targets [14]. Therefore, employees' commitment is crucial for organizations, since organizations comprise employees and employees' motives to work for organizational goals are decisive for organizational success. In this context, the studies on organizational commitment began in 1956 with the study of Whyte and afterward has attracted considerable attention by many researchers [15]. Organizational commitment refers to the strength of the bond that the employees feel against and of identification with the organization they work for [16]. Allen and Meyer [17] also defined organizational commitment as a psychological

state which binds to the employee to the organization. Furthermore, organizational commitment is characterized with three elements: (i) acceptance and belief of organizational goals, (ii) being enthusiastic about to put in the effort for organization, (iii) being a willingness to continue the membership of the organization [5].

According to the widely accepted and used classification in the literature, organizational commitment consists of three dimensions: affective, continuance and normative commitment [18]. These dimensions are the components of organizational commitment, not types and they determine the overall organizational commitment of employees to organization [17]. Affective commitment is an employee's attachment to and identification with an organization emotionally [19]. Continuance commitment is an employee's opting to continue in the existing organization because of the cost of leaving [20]. Normative commitment is an employee's prefer to remain to work in existing organization because of the feelings of obligation [17]. In brief, affective commitment is about a desire to continue employment, continuance commitment is about a need to continue employment and normative commitment is about an obligation to continue employment in the organization [19].

3. Hypotheses Development

3.1. Organizational Justice and Organizational Commitment

Employees' perceptions of justice influence their attitudes and behaviors [1]. Because employees want to get the outcomes they deserve. If they don't get, they can get away from the organization and everything else about the organization. In this context, fairness in the organization important for employees to feel that they belong in the organization. When employees believe that they are on equal terms with other employees in the organization and that senior management treats everyone in the organization equally, they may see themselves as a part of the organization. Furthermore, what the employees feel about payments, managers, and colleagues affect their decision to serve sincerely or not to strive for the organization [21]. Namely, fairness is the determinant of desire to remain in the organization, willingness to work for the benefit of the organization and embrace the aims of the organization which are the factors that characterize organizational commitment according to Mowday, Steers, and Porter [5]. Hence;

H1- Organizational justice is positively related to organizational commitment.

3.2. Organizational Justice and Knowledge Sharing

Fairness in the organization is playing a key role in a personal decision to donate and collect the knowledge within the organization and also for the organization. Employees are willing to share ideas, knowledge, and experiences in cases where organizational procedures are seen as fair and evaluation process is clear since they believe that what they express has the same value as the expressions of others in the organization [22]. Furthermore, employees who perceive justice in the organization tend to open to work in collaboration [13]. Because, as Cropanzano, Bowen, and Gilliland [10] stated, perceived justice is a "glue" that allows people to work in tandem and collaborative work triggers knowledge sharing. Moreover, if the contributions of employees are assessed and rewarded fairly, employees more prone to share own knowledge to add value for the organization and collect knowledge to be able to do own tasks better [22]. Hence;

H2- Organizational justice is positively related to knowledge sharing.

3.3. Organizational Justice and Firm Performance

Employees feel support and are motivated to work for organizational goals when they believe everything in the organization to be fair [23]. Because fairness in the organization provides that employees have a positive attitude and behavior toward the organization [4]. Since employees are the unique assets of firms, their positive attitudes toward the organization and their behavior for benefit of the organization determine firm performance status. In addition, when employees receive a fair reward for their contribution to the organization, they may try to do their job better and work harder for the organization's purposes, thus contribute to the organization's performance [24]. Hence;

H3- Organizational justice is positively related to firm performance.

3.4. Organizational Commitment and Knowledge Sharing

Organizational commitment is the strength of employee's identification with the organization [16] and it leads to many positive organizational outcomes. If employees want to continue working in an organization, they want the organization to succeed. Because when the organization is successful, employees also benefit from it. This benefit

may be about wage, a continuance to the current situation or pride. For this purpose, employees work to attain organizational goals. In other words, employees with high commitment are disposed to add value to organization and knowledge sharing is the best way to do it because of that knowledge is the most important power for organizations today [25]. Hence;

H4- Organizational commitment is positively related to knowledge sharing.

3.5. Organizational Commitment and Firm Performance

Organizational commitment is important for the organization to be more successful by maximum benefiting from employees, as it reduces behaviors of employees that is harmful to the organization such as lateness and absenteeism [26]. Because, organizational commitment ensured to binds to the employee to the organization [17]. An employee with a commitment to organization interiorizes the organizational objectives and act appropriately to achieve these goals In this respect, efforts of these employees are steps for the organization to achieve its goals and to be successful. Thus, employees provide better service and enhance firm performance [27]. Hence;

H5- Organizational commitment is positively related to firm performance.

3.6. Knowledge Sharing and Firm Performance

Knowledge sharing is a bidirectional process and both sides enhance knowledge, competences, and experience [28]. It also has an impact on organizations. Because the knowledge sharing between employees in an organization both improve employees relations with each other and make knowledge a value within the organization. Knowledge sharing enhances organizational knowledge, improves existing capabilities and thereby increases the efficiency of the organization by providing knowledge flow within the organization [29]. Because knowledge is an intangible asset that provides a sustainable competitive advantage for organizations [30]. Hence;

H6- Knowledge sharing is positively related to firm performance.

4. Research Method and Analysis

4.1. Measures and Sampling

All the scales were adopted from prior studies and all they are measured by five-point Likert scale. Organizational justice scale is adopted from Niehoff, and Moorman [31]. The scale for organizational commitment was adopted from Meyer, Allen, and Smith [32]. For knowledge sharing, the scale was adopted from Lin [33] who adapted the scale of Van den Hoof and Van Weene [34]. The scale to measure firm performance was adopted from Wang, Wang, and Liang [29].

Data was collected through a survey questionnaire. In a total of 211 questionnaires is gathered from 101 firms. 57.8% of our respondents are man. In 70.6% of the firms, there are 500 or fewer employees work in. 50.2% of firms were established in the last twenty years.

4.1. Measure Validity and Reliability

Confirmatory factor analysis (CFA) is used to assess the validity and reliability of measures. The results of CFA is shown in Table 1. The results indicates the adequate model fit.($\chi^2/df= 1.93$, CFI = .89, IFI=.90, PNFI= .71, RMSEA=0,067).

Table 1. The Results of CFA

Variables	Items	1	2	3	4	5	6	7	9	10
Distributive Justice	OJ1	.776								
	OJ2	.779								
	OJ3	.852								
	OJ4	.785								
	OJ5	.827								
Procedural Justice	OJ6		.833							
	OJ7		.825							

	OJ8	.816		
	OJ9	.809		
	OJ10	.834		
	OJ11	.734		
	OJ12	.817		
	OJ13	.815		
	OJ14	.858		
Interactional	OJ15	.866		
Justice	OJ16	.886		
	OJ17	.872		
	OJ18	.917		
	OJ19	.896		
	OJ20	.863		
	OC14	.735		
Normative	OC15	.648		
Commitment	OC16	.769		
	OC17	.866		
	OC18	.751		
Knowledge	KS1	.729		
Donating	KS2	.838		
	KS3	.842		
	KS4	.668		
Knowledge	KS6	.938		
Collecting	KS7	.966		
	FP1	.786		
Operational	FP2	.793		
Performance	FP3	.794		
	FP4	.853		
	FP5	.845		
	FP6	.832		
Financial	FP7	.912		
Performance	FP8	.901		
	FP9	.933		
	FP10	.921		
	FP11	.927		
	OC1	.656		
Affective	OC3	.673		
Commitment	OC4	.831		
	OC5	.820		
	OC6	.641		
Continuance	OC9			.706
Commitment	OC10			.782
	OC11			.547

Table 2 shows the correlation coefficients of our variables. Average variance extracted (AVE) are close to or exceed the threshold level, and composite reliabilities (CR) also exceeds the .70 [35]. Furthermore, Cronbach's alpha coefficients are above the minimum level that is .70 suggested by Nunnally [36]. In conclusion, these results confirm the validity and reliability of our measures.

Table 2. Correlation Coefficients, Validity and Reliability Scores

	1	2	3	4	5	6	7	8	9	10
OperationalP	1									
DistributiveJ	.572	1								
Proceduralj	.573	.732	1							
InteractionalJ	.483	.580	.894	1						
AffectiveC	.563	.591	.677	.584	1					
Normativec	.567	.614	.530	.484	.788	1				
KS_donating	.471	.361	.463	.458	.437	.452	1			
KS_collecting	.359	.419	.489	.448	.393	.346	.810	1		
FinancialP	.800	.422	.433	.379	.417	.536	.365	.303	1	
ContinuanceC	-.032	-.060	-.115	-.146	.030	.145	-.014	-.021	-.049	1
Cronbach's α	.913	.902	.921	.965	.857	.874	.844	.885	.963	.711
AVE	.664	.647	.655	.750	.531	.573	.648	.753	.819	.470
CR	.908	.901	.919	.964	.848	.869	.846	.899	.964	.722

4.2. Hypothesis Testing

Structural equation modeling (SEM) analysis is performed to test the hypotheses and all the variables are used as second-order construct. According to results, conceptual model fits the data ($\chi^2/df = 1.957$, CFI: .89, IFI: .89, TLI: .88, RMSEA: .068). The results are shown in Table 2. According to results, organizational justice is positively related to organizational commitment ($\beta = .689$, $p < .01$), knowledge sharing ($\beta = .355$, $p < .01$) and firm performance ($\beta = .208$, $p < .05$). Organizational commitment is positively related to knowledge sharing ($\beta = .258$, $p < .05$) and firm performance ($\beta = .415$, $p < .01$). Furthermore, it is found that knowledge sharing is positively related to firm performance ($\beta = .141$, $p < .1$).

Table 3. Path Model

Hypotheses	Path	Path Coefficient	Result
H1	Organizational Justice → Organizational Commitment	.689***	Supported
H2	Organizational Justice → Knowledge Sharing	.355***	Supported
H3	Organizational Justice → Firm Performance	.208**	Supported
H4	Organizational Commitment → Knowledge Sharing	.258**	Supported
H5	Organizational Commitment → Firm Performance	.415***	Supported
H6	Knowledge Sharing → Firm Performance	.141*	Supported

$$\chi^2/df = 1.957, \text{CFI: } .89, \text{IFI: } .89, \text{TLI: } .88, \text{RMSEA: } .068$$

*** $p < .01$ ** $p < .05$ * $p < .1$

5. Discussion and Conclusion

This study aims to investigate the relationships between organizational justice, organizational commitment, knowledge sharing, and firm performance. Thus, this empirical study contributes to the literature by providing a

comprehensive understanding of these relationships.

Findings of this research indicate that organizational justice is a determinant for organizational commitment. This result is consistent with previous studies [1][11][25]. It is also indicated that organizational justice is associated with knowledge sharing. It is also consistent with the findings of previous researches [13][25]. Furthermore, it is found that organizational justice is related to firm performance and it is consistent with the previous studies [37]. In this respect, fairness in all the organizational procedures and allocation of outcomes must be ensured. Because perceived fairness will make employees feel a commitment to the organization and will work wholeheartedly for the benefit of the organization.

This paper demonstrates that organizational commitment is an important factor that affects the employees' knowledge sharing. This finding supports previous studies [38] [25]. Our results are also indicated that organizational commitment is related to firm performance and this is consistent with previous researches [39] [26]. It is deduced from these results that employees with a commitment to organizations exhibit behavior for the benefit of the organization. For this reason, it should be ensured that employees in organizations feel a commitment to the organization. In this way, the employees see themselves as a member of the organization and do their best to get the company to be better placed in the market. Since the most important value of the company is its employees, everything that the employees will do for the benefit of the firm will add value to the firm. Thus, the success of the company will be inevitable.

The results of this study reveal that knowledge sharing is related to firm performance. This finding consistent with previous studies [40] [28][29]. Namely, knowledge sharing within the organization positively affects the performance of the company. For this reason, knowledge sharing of employees should be supported and situations that facilitate this should be provided. Training may also be given to employees about knowledge sharing. Furthermore, new ideas should be supported by especially managers. Thus, employees do not hesitate to share their knowledge and experience.

In addition to many contributions of this study, there are some methodological limitations. First, this research is conducted in Kocaeli and Istanbul, in Turkey. Therefore, the results may change when it is conducted in any other cities, regions, and countries. Second, this study is cross-sectional research. Namely, if conditions are changed when data is collected, results may be changed. Third, this study prone to common method variance problem.

This study provides a basis for future studies. Further studies may conduct this research in any other district area. Researches may also investigate the moderating role of organizational support in the relationship between organizational justice and knowledge sharing and in the relationship between organizational commitment and knowledge sharing. Researchers may also investigate the moderating role of organizational culture, organizational climate and leadership in the relationship especially between organizational justice and organizational commitment.

References

- [1] Ponnu, C. H., & Chuah, C. C. (2010) "Organizational commitment, organizational justice and employee turnover in Malaysia." *African Journal of Business Management* **4(13)**: 2676-2692.
- [2] Gabčanová, I. (2011) "The employees—the most important asset in the organizations." *Human Resources Management & Ergonomics* **5(1)**: 30-33.
- [3] Iqbal, Q., & Ahmad, B. (2016) "Organizational Justice, Trust and Organizational Commitment in Banking Sector of Pakistan." *Journal of Applied Economics and Business* **4(1)**: 26-43.
- [4] Rita Silva, M., & Caetano, A. (2014) "Organizational justice: what changes, what remains the same?." *Journal of Organizational Change Management* **27(1)**: 23-40.
- [5] Mowday, R. T., Steers, R. M., & Porter, L. W. (1979) "The measurement of organizational commitment." *Journal of vocational behavior* **14(2)**: 224-247.
- [6] Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O., & Ng, K. Y. (2001) "Justice at the millennium: a meta-analytic review of 25 years of organizational justice research." *Journal of applied psychology* **86(3)**: 425-445.
- [7] Greenberg, J. (1990) "Organizational justice: Yesterday, today, and tomorrow." *Journal of management* **16(2)**: 399-432.
- [8] Cohen-Charash, Y., & Spector, P. E. (2001) "The role of justice in organizations: A meta-analysis." *Organizational behavior and human decision processes* **86(2)**: 278-321.
- [9] Byrne, Z. S., & Cropanzano, R. (2001) "The history of organizational justice: The founders speak" *Justice in the workplace: From theory to practice* **2(1)**: 3-26.
- [10] Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007) "The management of organizational justice." *Academy of management perspectives* **21(4)**: 34-48.

- [11] Rahman, A., Shahzad, N., Mustafa, K., Khan, M. F., & Qurashi, F. (2016) "Effects of organizational justice on organizational commitment." *International Journal of Economics and Financial Issues* **6(3S)**: 188-196.
- [12] Chen, S. Y., Wu, W. C., Chang, C. S., Lin, C. T., Kung, J. Y., Weng, H. C., ... & Lee, S. I. (2015) "Organizational justice, trust, and identification and their effects on organizational commitment in hospital nursing staff." *BMC health services research* **15(1)**: 363.
- [13] li, T., Lei, S., Haider, M. J., Hussain, S. T., & Puig, L. C. M. (2017) "The effect of organizational justice on knowledge sharing: Empirical evidence from the Chinese telecommunications sector." *Journal of Innovation & Knowledge* **2(3)**: 134-145.
- [14] Meyer, J. P., & Herscovitch, L. (2001). "Commitment in the workplace: Toward a general model." *Human resource management review* **11(3)**: 299-326.
- [15] Oyinlade, A. O. (2018) "Relations of Job Structure to Affective Organizational Commitment." *Journal of Human Resources Management and Labor Studies* **6(1)**: 13-32.
- [16] Steers, R. M. (1977) "Antecedents and outcomes of organizational commitment." *Administrative science quarterly* **22(1)**: 46-56.
- [17] Allen, N. J., & Meyer, J. P. (1990) "The measurement and antecedents of affective, continuance and normative commitment to the organization." *Journal of occupational psychology* **63(1)**: 1-18.
- [18] Meyer, J.P., & Allen, N.J. (1987) "A Longitudinal Analysis of The Early Development and Consequences of Organizational Commitment." *Canadian Journal of Behavioral Science* **19(2)**: 199-215.
- [19] Meyer, J. P., & Allen, N. J. (1991) "A three-component conceptualization of organizational commitment." *Human resource management review* **1(1)**: 61-89.
- [20] Meyer, J. P., Stanley, D. J., Jackson, T. A., McInnis, K. J., Maltin, E. R., & Sheppard, L. (2012) "Affective, normative, and continuance commitment levels across cultures: A meta-analysis." *Journal of Vocational Behavior* **80(2)**: 225-245.
- [21] Suliman, A., & Al Kathairi, M. (2012) "Organizational justice, commitment and performance in developing countries: The case of the UAE." *Employee Relations* **35(1)**: 98-115.
- [22] Ibragimova, B., Ryan, S. D., Windsor, J. C., & Prybutok, V. R. (2012) "Understanding the Antecedents of Knowledge Sharing: An Organizational Justice Perspective." *Informing Science: The International Journal of an Emerging Transdiscipline* **15**: 183-205.
- [23] Gomes, D., Asseiro, V., & Ribeiro, N. (2013) "Triggering employee motivation in adverse organizational contexts: "going the extra mile" while holding hands with uncertainty?." *Business and Management Research* **2(1)**: 41-54.
- [24] Krishnan, R., Loon, K. W., & Yunus, N. A. S. (2018) "Examining the Relationship between Organizational Justice and Job Performance." *International Journal of Academic Research in Business and Social Sciences* **8(3)**: 466-477.
- [25] Li, X., Zhang, J., Zhang, S., & Zhou, M. (2017) "A multilevel analysis of the role of interactional justice in promoting knowledge-sharing behavior: The mediated role of organizational commitment." *Industrial Marketing Management* **62**: 226-233.
- [26] Irefin, P., & Mechanic, M. A. (2014) "Effect of employee commitment on organizational performance in Coca Cola Nigeria Limited Maiduguri, Borno state." *Journal of Humanities and Social Science* **19(3)**: 33-41.
- [27] Roca-Puig, V., Beltrán-Martin, I., Escrig-Tena, A. B., & Bou-Llusar, J. C. (2005) "Strategic flexibility as a moderator of the relationship between commitment to employees and performance in service firms." *The International Journal of Human Resource Management* **16(11)**: 2075-2093.
- [28] Wang, Z., & Wang, N. (2012) "Knowledge sharing, innovation and firm performance." *Expert systems with applications* **39(10)**: 8899-8908.
- [29] Wang, Z., Wang, N., & Liang, H. (2014) "Knowledge sharing, intellectual capital and firm performance." *Management decision* **52(2)**: 230-258.
- [30] Teece, D. J. (2007) "Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance." *Strategic management journal* **28(13)**: 1319-1350.
- [31] Niehoff, B. P., & Moorman, R. H. (1993) "Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior." *Academy of Management journal* **36(3)**: 527-556.
- [32] Meyer, J. P., Allen, N. J., & Smith, C. A. (1993) "Commitment to organizations and occupations: Extension and test of a three-component conceptualization." *Journal of applied psychology* **78(4)**: 538-551.
- [33] Lin, H. F. (2007) "Knowledge sharing and firm innovation capability: an empirical study." *International Journal of manpower* **28(3/4)**: 315-332.
- [34] Van den Hooff, B., & de Leeuw van Weenen, F. (2004) "Committed to share: commitment and CMC use as antecedents of knowledge sharing." *Knowledge and process management* **11(1)**: 13-24.
- [35] Fornell, C., & Larcker, D. F. (1981) "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research* **18(1)**: 39-51.
- [36] Nunnally, J. C. (1978) *Psychometric Theory* (2nd ed.), New York, McGraw-Hill.
- [37] Zehir, C., & Yildirim, G. (2015) "The Effect Of Organizational Justice Perception Of Employees On Individual And Firm Performance in Transformational Leadership Context." *Journal of Global Strategic Management* **9(2)**: 51-63.
- [38] Han, T. S., Chiang, H. H., & Chang, A. (2010) "Employee participation in decision making, psychological ownership and knowledge sharing: mediating role of organizational commitment in Taiwanese high-tech organizations." *The International Journal of Human Resource Management* **21(12)**: 2218-2233.
- [39] Elorza, U., Aritzeta, A., & Ayestarán, S. (2011) "Exploring the black box in Spanish firms: the effect of the actual and perceived system on employees' commitment and organizational performance." *The International Journal of Human Resource Management* **22(7)**: 1401-1422.
- [40] Du, R., Ai, S., & Ren, Y. (2007) "Relationship between knowledge sharing and performance: A survey in Xi'an, China." *Expert systems with Applications* **32(1)**: 38-46.