Influence of Hierarchical Perceived Support difference : Perceived Supervisor Support and Coworker Support

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Abstract

Rhoades & Eisenberger [1] stated supervisors act as agent of the organization, then employees develop global view concerning the degree to which supervisors value their contributions and care about their well-being. Eisenberger & Stinglehamber [2] indicated strength of influence on the perceived organizational support (POS) follows to the status of supervisors. Zagenczyk et al. [3] reported coworkers' influence on POS through social network. But there are few studies on perceived supervisor support (PSS) depending on hierarchy and perceived coworker support (PCS). This studies investigated difference of influence on affective commitment (AC) and citizenship behavior (OCB) from PSS and PCS. Subject of research are technical employees working in steel product factories located in Japan. We analyzed data by regression analysis and covariance structure analysis. We found that (1) Influence of PSS on AC and OCB does not depends on hierarchical order of the organization. (2) PCS influence on AC and OCB more than that from factory manager and immediate supervisor. (3) Affective commitment (AC) mediate between perceived coworker and supervisor support and citizenship behavior. Study suggested that perceived support of coworker and powerful boss have strong influence on employees.

Keywords: *Perceived Coworker Support, Perceived Supervisor Support, Affective Commitment, Organizational Citizenship behavior*

1. Background

Voices calling for review and change for the way of working have been rapidly expanding in Japan. The relationship between employees and the organization (EOR) has attracted attention as a prerequisite for reviewing the system. As the relationship between employees and organization continues to change in accordance with changes in the business environment and the social environment, a lot of researches has been done in Europe and the US since the beginning of the 20th century [4]. Among them, empirical studies of Organizational Support Theory (OST) and POS [5] which based on employees' viewpoint of are advancing. The correlation between POS and employees' commitment, extra-role behavior, and citizenship behavior has already been demonstrated in many studies.

However, there has been little empirical studies on Japanese companies. There are not many hierarchical studies on Perceived Supervisor Support (PSS) focused on the manufacturing site.

We would like to clarify the current situation of EOR at the manufacturing site. By doing this we expect to be able to make an opportunity to add elements from the viewpoint of employees to researches on the competitiveness of the manufacturing site.

2. Previous Studies

In the past management strategy theory, the relationship between an organization and employees, were considered on the premise that If the organization gave employees resources and initiative they should respond to this by dedication and loyalty to the organization. This concept have been widely accepted.

POS was proposed by [5], and many researchers have been studying and substantial research papers have been published. Rhoades & Eisenberger [1] reviewed more than 70 studies concerning POS. They reviewed basic hypothesized antecedents and attitudinal consequences. Kurtessis et al. [6] carried out meta-analytic assessment of OST using 558 studies.

2.1 Organizational support theory and Perceived organizational support

OST indicate that employees personify the organization, viewing it as having a personality with benevolent or mal benevolent intentions toward them [2]. Based on this organization's personification, employees would view the treatment received from the organization as an indication that it favors or disfavors them [7]. Favorable treatment would contribute more to POS if it is attributed to the organization's discretionary actions

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than if it is considered as the result of external constraints [5, 7].

Three types of perceived organizational treatments are said to increase perceived organizational support. These antecedents are Fairness, Supervisor Support and Organizational rewards and job conditions. Concept of Fairness includes several types of fairness, structural (i.e. formal rules and policies, voice) and social aspects, sometimes called interactional justice [1].

Levinson [8] suggested that the actions of members of the organization as its agents, tends to be perceived by employees as actions of the organization itself [5]. Eisenberger stated that he began to start thinking about the employee's view point and found several early studies had suggested that employee's perception of positive valuation by the organization enhances employee's favorable orientation toward the organization and behaviors helpful to the organization [2]. Eisenberger concluded that employees might develop a general belief concerning the extent to which the organization values their contributions and cares about their well-being and named this employee belief [5].

POS lead employees to take more positive orientations toward work and the organization. Such outcomes that have been found by researchers were enjoyment of work (empowerment, engagement, and involvement) and positive orientation toward the organization (commitment, identification, trust, and reduced cynicism) [2]. POS should also increase AC by fulfilling such needs as affiliation and emotional support. [9].

2.2 Social exchange theory

Employment have been alluded by organizational theorists as the trade of effort and loyalty for material and socioemotional rewards [8]. These traditional approaches emphasize the gain to organizations produced by the beneficial treatment of employees. From employees' view point, favorable work experiences foster emotional bond to the organization. Employees who feel supported by the organization are more likely to feel obliged to care about the organization's welfare and help it to reach its objectives [10].

The norm of reciprocity is a key concept in social exchange theory. The reciprocity norm has been termed universal because it has been found to be influential in every culture in which it has been studied, whether primitive or modern [2, 11]. Gouldner called reciprocity norm as a starting mechanism. The positive reciprocity norm applies to employee-employer relationship as well as interpersonal relationship, obliging employees to recompense by helping favorable or unfavorable treatment. If there is an opportunity, employees may work harder or more carefully in standard job activities, or may increase such extra-role or citizenship behaviors [2].

2.3 Supervisor Support

Supervisors act as agents of the organization having responsibility for directing and evaluating subordinates' performance, employee views their supervisors' favorable or unfavorable orientation toward them as indicative of the organization's support [1]. Supervisors who perceived that they were treated fairly by the organization could reciprocate by treating subordinates more favorably [12].

Several studies show that the perception of PSS is strongly linked to POS [13, 14, 15]. Employees are in a relationship based on a long-term relationship to the organization as a whole and direct supervisors [16].

2.4 Coworker support

Zagenczyk et al. [3] suggested that employees' POS are not solely a product of independent evaluation of treatment offered by the organization, but are also shaped by the social context. And, they proposed that coworker as will directly (through inquiry via cohesive friendship and advice ties) and indirectly (through monitoring of employees structural equivalent in advice and friendship networks) affect employees' POS. The findings suggested that social networks, as well as the traditional hierarchy, contribute to POS [3, 2].

2.5 Organizational Commitment

Meyer & Allen [17] proposed a multidimensional concept as a commitment which is an important element that determines the dedication and loyalty of employees to the organization. Affective commitment refers to the employees' emotional attachment to, identification with, and involvement in the organization. Employees want to continue employment with organization. Continuance commitment refers to an awareness of the costs associated with leaving the organization. Employees need to do so. Normative commitment reflects a feeling of obligation to continue employment. They feel that they ought to remain with the organization.

Employees' emotional bond to their organization has been considered as an important determinant of dedication and loyalty [2]. The more employees feel supported by the organization, the more they feel emotionally attached to it [18, 16]. Many studies have reported POS and AC are strongly related yet distinct [14, 18, 19]. Rhoades et al. [14] indicated the causal relation between POS and AC. Employees will be more affectively committed to an employer when the employer commits to a long-term relationship [20].

On the basis of reciprocity norm, employees seek a balance in their exchange relations with the organization by developing attitudes and behaviors commensurate with their favorable treatment by the organization [2]. On the other hand, Eisenberger & Stinglehamer [2] suggested that POS may help to increase AC by fulfilling socioemotional needs.

2.6 Organizational citizenship behavior

Katz [21] stated that there must always be a supportive number of actions of innovation or relatively spontaneous sort. An organization which depends solely upon its blueprints of prescribed behavior is a very fragile social system. Smith et al. [22] suggested that citizenship behavior includes at least two separate dimension altruism or helping specific persons, and general compliance, a more impersonal form of conscientious citizenship. Coyle-Shapiro et al. [23] stated that employees engage in OCB to reciprocate the organization for fair treatment or withhold those behaviors in response to unfair treatment.

Takagi [24] indicated that some researchers point out that although organizational citizenship behavior is positioned as out-of-role behavior, its position is not necessarily clear [25]. In addition, Coyle-Shapiro et al. [23] similarly showed that the boundary between role behavior and out-of-role behavior is not clear.

3. Hypothesis

Several studies show that the PSS is strongly linked to POS [13, 14, 15]. Employees develop general views concerning degree to which supervisor value their contribution and care about their well-being [1]. Kurtessis et al. [6] indicated that supervisors and others in leadership role play a key role in providing organizational rewards and resources to employees, and thus should be viewed as greater source of organizational support than coworkers. When Supervisors act as organizational agent, PSS should contribute to POS, strength of this relationship depend on employee's perception of status of the supervisor [15]. And, Eisenberger & Stinglehamer [2] stated that supportive treatment from upper management should be judged by employees as more indicative of organizational support than supportive treatment from other organizational members lower in the organization.

There is a difference in the perception of support that employees receive from management, supervisor, coworker and subordinate depending on their role. Supervisors have roles with the authority to direct, evaluate and reward performance. Coworker affects POS by aid and cooperation and by conveying their opinion of organizational support [2].

Wayne et al. [26] indicated emotional aspects in the relationship between supervisors and subordinates in leader and member relationship (LMX). However, they argued that affective commitment to the organization is not born from a good relationship between supervisors and subordinates.

On the other hand, Hutchinson [19] stated that there were relationship supervisor support and AC mediated by POS. Beneficial treatment received from a supervisor should increase POS to the extent that such treatment is attributed to organization's policies but not to supervisor's idiosyncratic motivation [14]. Eisenberger et al. [15] stated by quoting [27] that based on the reciprocity norm, PSS increase extra-role performance beneficial to

the supervisor and the organization. Settoon et al. [16] consider PSS on the premise of the dyadic relationship between employees and their superiors. And they stated that there was a strong correlation between PSS and OCB.

We estimate that the relations between PSS / PCS and AC may not depend on hierarchical status.

Hypothesis 1. Influences of Perceived supervisor support on Affective commitment and Citizenship behavior does not depend on the hierarchical status.

Studies on employee's PCS is not many. Ladd & Henry [28] suggested that there was a relationship between PCS and OCB targeted toward specific individuals [29]. However, according to OST, perceived support initiates social exchange process and also fulfills emotional needs [5, 6].

We estimate PCS may have almost same consequences as of PSS, like AC and OCB.

Hypothesis 2. Perceived coworker support influence on Affective commitment and Citizenship behavior.

Meyer & Allen's model indicated AC mediate between work experience and job behavior (including citizenship behavior). They stated that employee who want to belong to the organization (affective commitment) might be more to exert efforts on behalf of organization [17]. Quoting [17], Eisenberger et al. [10] stated that work experiences contributing to employee comfort and perceived competence should enhance emotional attachment. POS might contribute such experiences. PSS may make employees experience similar work feeling, which will derive emotional attachment.

We assume that AC will mediate relations between PSS and PCS and OCB.

Hypothesis 3. Affective commitment mediates between Perceived coworker and supervisor support and Citizenship Behavior

4. Method

4.1 Sample and Procedure

Research target employees are working in 2 factories of a technology dependent products manufacturing company belonging to a major steel company group. Since its foundation about 70 years, the company has been developing, designing and producing key components using the parent company's products as raw materials. Factories are at the central area and mid north east region in Japan. Products are mainly used for automobiles, housing and public civil engineering projects. The company has a head office function in Tokyo. But, 81% of total employees (175 employees) are working in the two factories. The ratio of female employees is less than 0.5%, while the number of part-time employees is only a few, the ratio of male regular employees is very high.

Each factories are headed by the factory manager who is in the top hierarchy. Both factories are actually moved under almost same system, consist of 4 department (manufacturing, operation, facility and quality management) The workforce of the manufacturing divisions of both factories exceeds 60%. Employees engaged in manufacturing are mainly locally hired people. The manufacturing is done by two shifts. Each shift consist of 4-6 work teams. Depending on the size of manufacturing equipment, work teams are consisted of 5-8 people. The work team members are fixed.

The personnel evaluation system is open to evaluation routes and evaluation items. A personnel evaluation system based on self-evaluation has been established.

4.2 Measures

We got an agreement that the corporate auditor act as insiders principally conduct a questionnaire survey, and we cooperate in questionnaire preparation and analysis. At first, as a preparation of this, we attended the auditor's annual personal interviews in two factories.

The target of the questionnaire survey was set to 89 employees working in manufacturing site of 2 factories. The average age of employees working in factories is 34 years. Average tenure is 11 years.

The questionnaire was positioned as a part of the audit's annual audit. Questionnaires were distributed from the corporate auditors' office via factory manager, according to organization hierarchy to 89 employees working in manufacturing sites of 2 factories. Effective replies were 83. (93.3%)

This questionnaire is anonymous. Employees were notified that they would respond with their own will, because it does not affect personnel evaluation etc. The questionnaires distributed and responded within working hour, then they were collected by the management department of the factory within few days and mailed to the auditor.

Figure1 Framework of this study.

Questionnaire survey questions are 31 items. Breakdown is 18 items related to PSS, 4 items of PCS, 6 items related to AC and 3 items of OCB.

PSS Of the 16 items of Survey of Perceived Supervisory Support (SPSS) [13], the questions that apparently made sense of incongruity at Japanese work place were excluded at first. After that, we decided to adopt 8 items reflecting the opinions of the factory manager and corporate auditors. With regard to PSS, in order to measure the extent to which employees perceive support from each hierarchical layer of supervisors, the target supervisors are divided into 3 layers according to the hierarchy. PSS Level 3 stands for PSS from shift Leaders and workgroup leaders who are immediate supervisors in the manufacturing site. PSS Level 2 stands for PSS from the department manager who is the chief of manufacturing. PSS Level 1 stands for PSS from the factory manager. Questions on PSS for each of the 3 hierarchical layer were set to 6 items, totaling 18 items.

PCS With regard to PCS, we selected 4 items from 9 survey items of Ladd & Henry [28] except for items that do not fit in the actual situation at work place in Japan reflecting opinion of the factory manager and the auditor. After that, in order to avoid confusion, we modified negatively worded item to positively worded with reference to [13].

AC Takagi [24] proposed to capture the affective commitment in two elements, the affective attachment and the identification. Keeping this in mind we made up six items as questions on the basis of AC scale of [30]. Items are as follows;

- I am always conscious of being a man of the company.
- I feel myself to be part of the company.
- What is important for the company is also important for me.
- I was really happy to find a job at this company instead of another company.
- I can tell friends that this company is a wonderful work place.
- I like this company.

OCB Because, it is difficult to clearly distinguish between intra-role behavior and extra-role behavior [25]. Takagi [24] presented voluntary, daily and concrete actions by employees in work place in Japan which were not stipulated as a role. We adopted 3 items (innovation, self-development, organization contribution). Items are as follows;

- I may propose to supervisor and coworker to improve performance, even outside official suggestion activities.
- I am trying to learn work even outside office hours.
- I am going to participate by going to events in my workplace.

Targeted employees used a seven-point Likert scale (1-strongly disagree, 7-strongly agree) to answer all questions.

5. Results

We carried out a Factor analysis on PSS Lev. 1, PSS Lev. 2, PSS Lev. 3 and PCS (Table 1): Factor analysis was conducted by Maximum likelihood method, Factor scores of 1 or more loading amount were preserved. Individual factor analysis was conducted on AC and OCB, we made variables based on factor scores.

Items	Factor			
	1	2	3	4
PSS Lev.1				
Factorymanager values my contribution to the well-being of our department.	0.837	0.134	0.298	0.025
Factorymanager wants to know if I have any complain.	0.877	0.035	0.236	0.052
Factorymanager really cares my well-being.	0.859	0.002	0.241	0.026
If I did the best job possible , factory manager would be sure to notice.	0.842	0.168	0.351	0.153
Factorymanager cares about my general satisfaction at work.	0.919	0.092	0.438	0.093
Factorymanager takes pride in my accomplishment.	0.868	0.127	0.447	0.038
PSS Lev.2				
Departmentmanager values my contribution to the well-being of our department.	0.354	0.483	0.841	0.329
Departmentmanager wants to know if I have any complain.	0.281	0.402	0.793	0.207
Departmentmanager really cares my well-being.	0.238	0.413	0.775	0.242
If I did the best job possible , departmentmanager would be sure to notice.	0.350	0.43	0.776	0.179
Departmentmanager cares about my general satisfaction at work.	0.339	0.385	0.900	0.125
Departmentmanager takes pride in my accomplishment.	0.337	0.444	0.895	0.280
PSS Lev.3				
Shiftchief (Workgroup leader) values my contribution to the well-being of our department.	0.049	0.891	0.469	0.469
Shiftchief (Workgroup leader) wants to know if I have any complain.	0.066	0.812	0.403	0.519
Shiftchief (Workgroup leader) really cares my well-being.	0.069	0.899	0.395	0.507
If I did the best job possible , Shiftchief (Workgroup leader) would be sure to notice.	0.104	0.744	0.405	0.412
Shiftchief (Workgroup leader) cares about my general satisfaction at work.	0.160	0.923	0.435	0.576
Shiftchief (Workgroup leader) takes pride in my accomplishment.	0.130	0.873	0.54	0.564
PCS				
Help is available from my coworker when I have problem.	0.071	0.442	0.197	0.727
My coworker really cares about my well-being.	0.073	0.605	0.192	0.942
If I did the best job possible , my coworker would be sure to notice.	0.039	0.48	0.259	0.866
My coworker cares about my opinion.	0.068	0.561	0.281	0.966
Percentage of variance explained	35.588	65.187	57.170	74.480

Note: PSS Lev.3 are calculated the average of the questions in the two hierarchies of immediate supervisor (shiftchief and workgroup leader) and then extracted factors

Table1. Factor analysis of PSS Lev. 1, Lev.2, Lev.3 and PCS

We used structural equation modeling (SEM) with SPSS Amos 24 to test hypothesis. Our sample was comprise of employees working in manufacturing sites in 2 factories. We included one control variable in our SEM: factories difference.

Model accurately explained the data as indicated by a RMSEA of 0.027, a GFI of 0.976, a AGFI 0.91 and a NFI 0.963. Chi Square is 0.38.

Figure 2. Structural equation model of the relationship between PSS Lev. 1, PSS Lev.2, PSS Lev.3, AC and OCB.

PSS Lev.1 presented a negative relation with AC ($\beta = -0.27$; $p = 0.011^{**}$), PSS Lev.2 presented a positive relation with AC ($\beta = 0.48$; $p < 0.01^{***}$), PSS Lev. 3 presented a negative relation with AC ($\beta = -0.3$; N.S.). Hypothesis 1 is partially supported.

As shown in Figure 1, PCS presented a positive relation with AC ($\beta = 0.28$; $p = 0.02^{**}$), AC presented a positive relation with OCB ($\beta = 0.64$; $p < 0.01^{***}$). Hypothesis 2 is supported.

Affective commitment mediates between Perceived coworker support and Perceived supervisor support and Citizenship Behavior. Hypothesis 3 is also supported.

6. Discussion

As a result of the SEM analysis, it was found that employees' PCS affects AC and OCB (citizen behavior) at the manufacturing site in japan.

The company emphasizes the sharing of tacit knowledge including the transfer of technology to increase workplace capacity and maintain competitiveness through knowledge creation [31]. They are focusing on enhancing social networks among employees by supporting informal exchanges among employees through various events. Support for questions on work and problem solving has a foundation on which to cross the work group. This also suggests that social networks are being strengthened. The company is promoting the environment in which a structural equivalence in social networks is born [3].

It is said that employment tradition in Japan is losing substance along with changes in social structure, but the lifetime employment system, which is the fundamental difference of the employment environment with the West, and the US continues in many companies. As a result, many employees are not concerned about job security. From employees' view point, employment is very close to the action of finding a place of relief. The relationship with coworkers is not only related to dyad like relation, but also a very long relation, employees are engaged in a group of organization working together until retirement. For employees the employment has an organizational meaning.

Wayne et al. [26] suggest that felt obligation, which is the basis of POS, as an emotion of employees, in response to the past decision of supervisors including supervisors who did not directly contact them. Mutual relationship between supervisor and his / her subordinates is temporary in terms of subordinates' organizational history. The subordinates are predicting that the relationship will be interrupted in the future. For this reason, although a good relationship is born between supervisor and his / her subordinates, it is said that emotional commitment to the organization is not born even if the felt obligation to the supervisor is born. On the other hand, by quoting [27], Eisenberger et al. [15] stated that based on the reciprocity norm. PSS should increase obligations to the supervisor and to the organization.

The results of the SEM analysis show that the influence of support perception does not conform to the organization's hierarchy. However, coworkers in the workplace are in the lower hierarchy, the influence from them is stronger than the manager of factory manager and immediate supervisor. This result is not consistent with previous studies [2].

The effect of support received from the factory manager represented a negative result. The factory manager is the highest hierarchy in the factory where employees consider themselves as their organization. As

well as employees regard other factory in the group as being outside of the organization to which they belong, the factory manager is regarded as a representative of the head office and may be regarded as being outside their organization. Employees may consider that support from the factory manager may not be discretionary decision but to execute instructions from the head office [5]. The upper manager (Powerful boss) is the second highest hierarchy in the factory next to the factory manager. Employees recognize that he receives high evaluation from the organization, has influence on important matters, and high self-judgment ability and authority [15]. Although the dyad-like relationship with the upper manager may not be as strong as immediate supervisors, from the viewpoint of the employees the relationship between upper manager and themselves seems to be stable in the medium term. It suggests that the PSS from the upper manager is likely to be considered as support from the organization [15]. Then, it enhances AC and OCB. The results of the SEM analysis is consistent with the previous studies.

As a result of the SEM analysis, it is shown that the influence of the shift leader and workgroup leader is not higher than the influence from coworker despite the fact that contact with employees is very high. The shift leader and workgroup leader have lower hierarchical status than the factory manager or upper manager, but rather is a supervisor close to a coworker. However, even if the relationship between supervisor and the employee deepens personally well, it is also visible to employees' view that this relationship may be cut off by movement of the organization [26]. For this reason, employees can't regard the influence of the shift leader and workgroup leader as an influence from the organization.

7. Implications and limitations

According to empirical study, PSS has no direct effect on AC but has an effect on OCB [26]. Although it is partly, the hierarchical influence of PSS on AC was revealed. Similarly, PSS was supported to influence to OCB.

PSS influence does not necessarily depend on the hierarchy within the organization. It was also found that PCS has influence on AC and OCB as well as PSS of powerful supervisor. The result is not consistent with empirical study.

Since the influence of PCS induces positive behavior of employees for the company mediated by AC, the company should promote social networks among employees other than for the purpose of knowledge creation.

Finally, this research has the following limitations. First, only regular employees of men at manufacturing sites in two factories are targeted for survey, so it can't be generalized to women or non-regular employees. Secondly, the two factories to which the targeted employees are working are part of the company within the group of steelmaking enterprise. As a result, it is also difficult to generalize to employees of firms with intense and unstable industries. Thirdly, since we focused attention on employees' viewpoint at manufacturing site,

the target workplace is limited and the number of samples in this survey is not so large. In the future it is desirable to extend the scope of the survey to the manufacturing sites such as the electronic equipment industry and the automobile industry.

References

- [1] L. Rhoades and R. Eisenberger: Perceived Organizational Support : A Review of Literature. *Journal of Applied Psychology*, Vol.87, (2002) No.4, 698-714.
- [2] R. Eisenberger and F. Stinglehamber (2011) Perceived Organizational Support. American Psychological Association (Washington D.C.,2011)
- [3] T. J. Zagenczyk, K. D. Scott, R. Gibney, A. J. Murrell and J. B. Thatcher : Social influence and perceived organizational support; A social network analysis, *Organizational Behavior and Human Decision Process*, 111, (2010) 127-138
- [4] J. Coyle-Shapiro and L. Shore: The employee-organization relationship: Where do we go from here? *Human Resource Management Review*, 17, (2007) 166-179
- [5] R. Eisenberger, R. Huntington, Hutchinson and D. Sowa: Perceived Organizational Support. *Journal of Applied Psychology*, Vol. 71, No. 3, (1986) 500-507.
- [6] J. N. Kurtessis , R. Eisenberger, M.T. Ford, L. C. Buffardi, K. A. Stewart and C. S. Adis : Perceived Organizational Support: A Meta-Analytic Evaluation of Organizational Support Theory. *Journal of Management* Vol. 43 Issue 6, (2015) 1854-1884
- [7] F. Stinglehamber and C. Vandenberghe: Organizations and supervisors as sources of support and target of commitment: a longitudinal study, *Journal of organizational Behavior*, 24, (2003) 251-270
- [8] H. Levinson: The relation between man and Organization. *Administrative science quarterly*, Vol. 9, No.6, (1965) 61-685
- [9] S. Armeli, R. Eisenberger and P. Lynch: Perceived Organizational Support and Police Performance: The Moderating Influence of Socioemotional Needs. *Journal of Applied Psychology*, Vol. 83, No. 2, (1998) 288-297.
- [10] R. Eisenberger, S. Armeli, B. Rexwinkel, P. D. Lynch and L. Rhoades: Reciprocation of Perceived Organizational Support. *Journal of Applied Psychology*, Vol.86, No.1, (2001) 42-51
- [11] A. Gouldner: The Norm of Reciprocity: A Preliminary Statement. *American Sociological Review*, April, Vol.25, No.2, (1960) 161-178
- [12] B. J. Tepper and E. C. Taylor : Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behavior, *Academy of management Journal*, Vol. 46, No. 1, (2003) 97-105
- [13] J. Kottke and C. Sharafinski: Measuring Perceived Supervisory and Organizational Support. *Educational and Psychological measurement*, 48, (1988) 1075-1079.

- [14] L. Rhoades, R. Eisenberger and S. Armeli: Affective Commitment to the Organization: The Contribution of Perceived Organizational Support. *Journal of Applied Psychology*, Vol.86, No.5, (2001) 825-836
- [15] R. Eisenberger, F. Stinglhamber, C. Vandenberghe, I. Sucharski and L. Rhoades.: Perceived Supervisor Support: Contributions to POS and employee retention. *Journal of Applied Psychology*, Vol. 87, Nov. 3, (2002) 365-573.
- [16] P. Settoon, N. Bernnet and C. Linden: Social exchange in organization: Perceived Organizational Support, Leader Member Exchange and employee reciprocity. *Journal of Applied Psychology*, Vol.81, No.3, (1996) 219-227.
- [17] J. Meyer and N. Allen: A Three-Component Conceptualization of Organizational Commitment. *Human Resource Management Review*, Vol.1, No.1, (1991) 61-89.
- [18] R. Eisenberger, P. Fasolo and V. Davis-LaMastro: Perceived Organizational Support and Employee Diligence, Commitment, and Innovation. *Journal of Applied psychology*, Vol.75, No.1, (1990) 51-59.
- [19] S. Hutchinson: A path model of perceived organizational support. *Journal of Social Behavior and Personality*, 12, (1997)159-174
- [20] A. Tsui, J. Pearce and A.Tripoli : Alternative approaches to the employee -organization relationship: Does investment in employment pay off ? *Academy of Management Journal*, Vol. 41, No.5, (1997) 1089-1121
- [21] D. Katz: The Motivational Basis of Organizational Behavior. *Behavioral Science*, 9, (1964) 131-146.
- [22] C. Smith, D.Organ and J. Near: Organizational Citizenship Behavior: Its Nature and Antecedents. *Journal of Applied Psychology*, Vol. 68, No.4, (1983) 653-663.
- [23] V. Coyle-Shapiro, I. Kessler and J. Purcell: Exploring Organizationally Directed Citizenship Behavior: Reciprocity or "It's my Job"? *Journal of Management Studies* 41, 0022-2380. (2004), 85-106
- [24] H. Takagi: Organizational commitment as a multidimensional concept: An examination of antecedents and outcomes. *Japanese Journal of Social Psychology*, Vol.18, No. 3, (2003)156-171
- [25] W. D. Organ: Organizational Citizenship Behavior: It's Construct Clean-Up Time. *Human Performance*, 10(2), (1997) 85-97
- [26] S. Wayne, L. Shore and R. Linden: Perceived organizational Support and leader-Member Exchange: Social Exchange Perspective. *Academy of Management Journal*, Vol. 41, (1997) 82-111
- [27] R. M. Malatest: Understanding the dynamics of organizational and supervisory commitment using a social exchange framework. Unpublished doctoral dissertation, (1995) Wayne State University, Detroit, MI.
- [28] D. Ladd and R. Henry: Helping Coworkers and Helping Organization: The Role of Support Perception, Exchange ideology. *Journal of Applied Psychology*, Vol.30, No.10, (2000)2028-2049.
- [29] J. Williams and E. Anderson: Job satisfaction and organizational commitment as predictor of Organizational Citizenship Behavior and in-role behavior. *Journal of Management*, 17, (1991) 601-617.
- [30] N. Allen and J. Meyer.: The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63 (1990) 1-18.
- [31] G. Von Krogh G: Care in knowledge creation, *California Management Review*, Vol.4, (3), (1998)133-153