# Effective Appraisal Systems: The Impact on Knowledge Sharing in the Lebanese Banking Sector

Silva Karkoulian
Assistant Professor
School of Business
Lebanese American University
P.O.Box 13-5053
Chouran-Beirut 1102 2801 – Lebanon
Phone: 009613770404
Email: skarkoul@lau.edu.lb

Yasmine Osman
Research Assistant
School of Business
Lebanese American University
P.O.Box 13-5053
Chouran-Beirut 1102 2801 – Lebanon
Phone: 009613828263
Email: yasmine.osman@lau.edu.lb

Effective Appraisal Systems: The Impact on Knowledge Sharing in the Lebanese Banking Sector

#### **ABSTRACT**

Providing and deploying effective strategies to support knowledge-sharing activities is imperative, yet it is achievable by understanding the factors that facilitate the knowledge transfer process (Chaudhry, 2005). Knowledge sharing is considered the central key to the success of all knowledge management strategies (Chaudhry, 2005). For an organization, knowledge sharing is the act of capturing, organizing, reusing, and transferring experience-based knowledge that reside within the organization and making that knowledge available to others in the business (Hsiu-Fen & Gwo-Guang, 2006). Once knowledge sharing becomes integrated in the organizational culture and incorporated into performance appraisal processes, the foundations for a real knowledge culture will be built which is important for organizational success. Moreover, communication and management are important factors in building a good business and they are enhanced by the adoption of a good performance appraisal system. Effective appraisal systems act as a primary vehicle for the measurement of management change in this rapidly changing world marketplace (longenecker, 1997). Appraisal systems occupy a core role in human resource management and remain an essential topic to be investigated among organizational researchers.

Many different appraisal techniques exist; the most important are: Self-Review appraisal, Immediate supervisor appraisal, Peer group appraisal, Team appraisal, overall assessment

appraisal, Upward appraisal, and the 360 degree appraisal. Each appraisal process has its own advantages and disadvantages. The best anyone can hope to do is to match the appropriate appraisal method in order to enhance knowledge sharing in an organization. According to the researchers knowledge, no literature review exists on performance appraisal and knowledge sharing, thus this research will provide an empirical investigation about the relationship between performance appraisal and knowledge sharing. It will examine thoroughly the effectiveness of the different performance appraisal systems on knowledge sharing within Lebanese organizations. It further suggests some means for adopting better performance appraisal system that may incorporate criteria for knowledge sharing.

## INTRODUCTION

# **Knowledge Sharing**

A stream of research on knowledge sharing behaviors has emerged from the literature affirming that knowledge sharing holds a relevant importance among core employees and might be a key element regarding the achievement of a sustainable competitive advantage (Cabrera & Cabrera, 2005; Nonaka & Takeuchi, 1995; Davis-Blake & Hui, 2003). This competitive advantage is provided through knowledge sharing activities by the creation of new opportunities which maximizes organizational utilities, and generates solutions to meet organizational needs (Reid, 2003). The importance given to knowledge sharing is mainly due to its activities such as helping communities of people work together, facilitating knowledge exchange, and increasing employee's ability in their individual

and organizational goal achievement (Dyer & Nobeoka, 2000). Hsiu-Fen (2006) states that a relevant aspect of knowledge sharing is that it can be seen as an organizational innovation having the capacity of generating new ideas and developing new business opportunities through socialization and learning process of knowledge workers. The promotion of knowledge sharing within a firm depends to a large extent on changing employee attitudes and behaviors to make them willing to share their knowledge (Lee & Choi, 2003; Moffet et al., 2003; Jones et al., 2006). Moreover, knowledge sharing practices are described in the knowledge management literature as linked to reward systems which are useful motivators for employees to share their knowledge (Bartol & Srivastava, 2002). According to Cabrera & Cabrera (2005), performance appraisal and reward systems should be designed as a tool for encouragement of the knowledge-sharing behaviors. Hence, when the organization rewards and recognizes these behaviors, it sends a signal to the employees that it values communication and interaction.

# Performance Appraisal

A good amount of research on performance appraisal exist, where most of the researchers define it as a tool, having the ability to increase the performance of employees and the effectiveness of the organization (McNamara, 2005; Katsanis et al., 1996; Bell, 1988a; Kamp, 1994; Kempton, 1995; Anon, 1999). According to Scholtes (1993), the purpose of performance appraisal is to control an individual's behavior to the manager's satisfaction. Dulebohn et al. (2004) defined performance appraisal as a key function of human resource management. Katsanis et al. (1996) described the effective performance appraisal as an encouragement tool to individual performance while reinforcing

organizational objectives. This is achieved by establishing personal performance objectives that are compatible with the overall organizational goals. In turn then, encouraging individual performance through performance appraisal that promotes overall organizational performance. Different purposes of appraisal exist, which are mainly: evaluating people's performance, recommending a salary increase, encouraging developmental growth within a position, e.g. if you are not appraised, what is the advantage of extra effort and growth?

According to Bell (1988a), appraisal is not an opportunity to criticize any individual's personality or opinions, or other colleagues. However, appraisal should focus on the individual educator's own performance to screen out some areas that could be improved as well as potentials for developing new skills and taking on more demanding jobs. Appraisals can also function as indicators for reward and promotion although this should not be their main focus. It is essential however to highlight, in general, some disadvantages of appraisal. The problem, of course, is that perverse effects are inevitable: "It is widely recognized that there are many things inherently wrong with most of the performance appraisal systems in use" (Levinson, 1991a, p.22). For example, sometimes poorly designed appraisal forms are used which tend to reduce credibility. Othertimes feedback and follow-ups can be inadequate (Anon, 1999). To be effective, appraisal must provide good feedback to the subordinates; McGregor (1957) and (1990) identifies this as a problem area because, first, lack of communication or inadequate communication can result in poor appraisal results. Second, not all managers tend to like new procedures or methods, thus resistance to administer new appraisal methods may arise. Another important impediment is the lack of trust in the appraisal method. According to Bell (1988a), the major difficulties associated with the introduction of appraisal relate to staff suspicion about the ability of their colleagues in middle or senior management to carry out an effective appraisal. Longenecker (1997) explains that well done managerial appraisals become an effective guidance tool, enhancing and rewarding managerial performance. However, poorly done managerial appraisals are a dysfunctional organizational practice leading to many negative consequences. There are many different techniques of appraisal the main of which are: Self-Review appraisal, Immediate supervisor appraisal, Team appraisal, Upward appraisal, and the 360 degree appraisal. Each appraisal process has its own advantages and disadvantages.

# **Appraisal Techniques**

Self-Review appraisal is a commonly used technique which consists of each employee appraising his or her own performance. This approach tends to lessen employee's defensiveness about the appraisal process and increases performance (Gibson, et al., 1994). In the immediate supervisor appraisal, the supervisor and the subordinate fill out identical appraisal forms and later compare the responses and discuss the agreement and disagreement areas (Vecchio, 1995). The upward appraisal technique is different from the previously discussed ones. Individual members or subordinates are asked to complete a performance appraisal on their supervisors. Moreover, there exists a method that combines appraisal types. The 360 degree appraisals are based on feedback from the full circle of contacts that an employee may have in performing their job. This may include bosses, peers or subordinates (Schermerhorn et al., 1998). Appraisal can be either a process of control or a means of empowerment, or both (Gibson, et al., 1994; Auteri,

1994; Kempton, 1995). When upward appraisal is being used, the result is greater empowerment for employees. However, according to Levison (1991) most managers do not want to be evaluated by their subordinates. Moreover, supervisors may become more concerned with the issue of popularity instead of effective performance of the work unit (Caruth, et al., 1988). The self-appraisal technique is similar to the upward appraisal. The similarity is due to the fact that the self-appraisal technique also leads to employee empowerment. The self appraisal technique allows employees to personally add input in their appraisal, the personal input results in employee development since employees start gaining insight into the real causes of performance problems (Gomez-Mejia et al, 1995). In the upward appraisal the bias is present because the employees tend to present a good image of their supervisors to please them; however, according to Robbins (1998), in the self appraisal the bias is present because employees tend to present a positive image of themselves. The immediate supervisor is used when the upward appraisal and the selfreview technique do not resolve the performance problem. Unlike the self-appraisal where the employees evaluate their performance in relation to set standards, the immediate supervisor appraisal entails the filling up of appraisal forms by the supervisor. Finally, the latest appraisal technique which is the 360 degree gives a wider range of performance-related feedback than the traditional evaluation techniques. The 360 degree appraisal combines the upward appraisal with the peer appraisal and the immediate supervisor appraisal. Regarding possible biases, the 360 degree appraisal appears to be a fair source of information since the appraisers biases are minimized (Kermally, 1997). Robbins (2001) argues that supervisors tend to reward their subordinates after the appraisal is completed, based on their abilities and skills that have been recognized from the performance evaluation. As argued by McGregor (1990), supervisors cannot escape making judgments about subordinates. Without such evaluations, salary and promotion policies cannot be administered fairly. According to Montgomery (1991), appraisal can function as an indicator for reward and promotion although this should be neither the main reason for conducting appraisals nor should this be given without a full appraisal. Rowan (1995) argues that the appraisal system is developmental, not deficiency seeking. Longenecker (1997) argues that a host of negative outcomes could occur when an organization does not do an effective job of appraising managerial performance. Ineffective appraisals might be a reason for managers to be demotivated and frustrated. Corcoran (2006) adds that managers fear the challenge of giving negative feedback since it could demotivate employees. Besides, when performance management is done properly it results in better communication and motivation.

As already mentioned, this research investigates which kind of performance appraisal leads to more knowledge sharing. In a world where sharing information is closely linked to everyday business problem solving (McDermott and O'Dell, 2001) it has become very important to uncover the best approaches that may lead to sharing knowledge. The implicit relation between knowledge sharing and performance appraisal drove this investigation and gave rise to five hypotheses:

- H1: Self-Review appraisal will be positively related to knowledge sharing
- H2: Immediate supervisor appraisal will be positively related to knowledge sharing
- H3: Team appraisal will be positively related to knowledge sharing
- H4: Upward appraisal will be positively related to knowledge sharing

H5: 360 degree appraisal will be positively related to knowledge sharing

H6: there is a causal direction from various kinds of performance to knowledge sharing

## **METHODOLOGY**

For this study, the sample was mainly chosen from banking organizations operating in the Lebanese industry. Questionnaires were distributed across 9 banks. A total of 220 were circulated with an overall response rate of 72.72%; that is 160 employees constituted our sample. Participants were encouraged to respond to all the questions in the surveys and were assured of absolute anonymity. The questionnaire designed for this study used rating scales for some questions. Their scores on the particular scale can be related to other measures of interest. The questionnaire consisted of 5 items that collected demographic and personal data and 32 questions using 5-point likert scale (1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree).

Every response is given a point value, and the respondent's score is determined by adding the point values of every statement in such a way that valid and reliable differences among individuals can be represented (using SPSS) ( Gay and Diehl, 1992; Bell, 1993; McIver and Carmines, 1994). The questionnaire was compiled to measure the effect of the different types of performance appraisal (independent variables) on knowledge sharing (dependent variable). For each dependent and independent variable there were four broad spectrum questions which cover different aspects within each dependent and independent variable. The results of each set of four questions were inputted into the

122

SPSS and averaged to a single value. Content validity was checked by asking those who read the interview whether or not the questions asked served the purpose of allowing a proper measurement of what was to be found. The result of standardized item alpha = 0.8947 showed an overall reliability of the questionnaire. The questionnaire used was constructed by the researcher based on the review of literature, that is to say this research is a contributory research in this field. The check for validity led to the little amendments in the questionnaire. A Pearson correlation was conducted to test the relationship of the dependent variables (Knowledge sharing) with five independent variables. Subsequently, to test the study hypotheses, a linear regression stepwise analysis was run. A regression equation was computed formulating the significance of the relationship, if any, between the designed variables.

#### **RESULTS**

# Characteristics of Scale

Table 1 point out the subscale, number of entries, means, standard deviations, and correlation of the independent and dependent variables.

-----

Insert table 1 Here

-----

# Forming Regression Equation with Knowledge Sharing:

Using knowledge sharing as the dependent variable, a regression analysis was conducted with Self-Review, Supervisor, Team, Upward, and 360 degree appraisal used as the independent variables. The analysis of these results generated the following equation. The results obtained are presented below:

Knowledge sharing = 0.713 + 0.012SelfReview + 0.038Supervisor + 0.149Team + 0.026Upward + 0.596ThreeSixty

Sig. level = 0.05, 
$$F = 36.466$$
,  $sig = 0.000$ ,  $R^2 = 0.542$ 

This equation partly supports H1, H2, and H4. The factors that emerged to be significant are Team and Three Sixty degree appraisal in relationship with Knowledge sharing. ThreeSixty degree appraisal showed the highest correlation among all other appraisals. These results partially explain the dependent variable, i.e. 54.2% of the variations in the discussed appraisal forms explain the variations in knowledge sharing; whilst the remaining 45.8% of the variations is not explained by these variables, i.e. it is explained by other variables.

# **Path Analysis**

Based upon the above regression equations and as an extension of regression analysis, the researchers were interested in examining more closely the factors that might be causing the knowledge sharing practice in the Lebanese organizations. For this purpose, path analysis was used. A set of additional regression equations was built to help in the creation of the path model

\_\_\_\_\_

Insert Figure 1

\_\_\_\_\_

These are the following:

Sharing = f (Team, 360° Feedback)

The envisioned model is shown in Figure 1, and the path coefficients were derived from the regression coefficients and error variances.

The model in Figure 1 contains five kinds of appraisal namely, Self-Review, Supervisor, Team, Upward, and 360 degree appraisal.

## **DISCUSSION**

According to the researchers knowledge, no literature review exists on the types of performance appraisal and knowledge sharing, thus this research will provide an empirical investigation about the relationship between performance appraisal and knowledge sharing. The aim of this study is to examine thoroughly the effectiveness of different performance appraisal systems on knowledge sharing within Lebanese organizations. It further suggests some means for adopting better performance appraisal system that may enhance knowledge sharing.

H1, H2, H3, H4, and H5 concluded that 360 degree appraisal proved to have the highest correlation with knowledge sharing. 360 degree appraisal has a sound theoretical base

because it has built into a form of triangulation which helps to ensure the validity in data collection and reliability of findings.

It is implied that 360 degree feedback is similar to the process of triangulation since it uses information from a wide range of sources no various aspects of the subject's performance and behavior (see Figure 2). The following minimizes bias due to the broad spectrum of appraisers rather than an exclusive reliance on one source (Coolican, 1996). An example could be the Immediate Supervisor appraisal whereby bosses may feel incapable of fairly evaluating the unique contributions of each subordinate. This is consistent with our finding where Immediate supervisor appraisal showed a very low correlation (0.038) with knowledge sharing, hence proving that the biases in appraisal would lead in low contributions of sharing knowledge among employees.

Moreover, 360 degree appraisal must be carefully managed so that its focus remains on constructive, rather than destructive criticism (Moorhead and Griffen, 1998). As also discussed by Cabrera and Cabrera (2005), performance evaluations should be based on a developmental rather than on a controlling focus. Mismanagement of appraisals may lead to a number of pitfalls. Oldham (2003) argues that a safe and non-judgmental organizational climate leads to employees more willing to share their ideas. He adds that people expecting developmental evaluations to share their creative ideas more than those expecting to receive critical evaluations.

According to Cabrera and Cabrera (2005), knowledge sharing should be evaluated and rewarded; it is preferable to base the evaluation and compensation systems on group and organizational-level outcomes rather than on individual outcomes. Appraising a team will

reinforce mutual cooperation and collective goals that would lead to a higher level of trust necessary for knowledge exchange (Kang et al., 2003). Working around teams is an opportunity for employees to collaborate and encourages knowledge sharing chiefly when rewards are based on team results. The joint collaboration of employees and joint responsibility would lead to action learning because the achievement of positive results necessitates that team members look up information and share what they find with others (Noe et al., 2003). Noe (2003) further adds that sharing knowledge is even greater when high interdependency exists among members. A positive relationship exists between task interdependence and knowledge sharing (Janz et al., 1997). Another representation of team work are the communities of practice where employees self-organize to help each other and share ideas about their work practices, hence resulting in learning and innovation within the community (Faraj and Wasko, 2001:3). The current study shows a positive and significant relation between knowledge sharing and team appraisal with a correlation of 0.15, thus "supporting" the idea that team work or communities of practice are a medium through which knowledge sharing is based (McDermott and O'Dell, 2001) and are encouraged through performance evaluations and promotion decisions (Lengnick-Hall and Lengnick-Hall, 2003). Appraisal and incentive systems based on group or firm performance will reinforce collective goals and mutual cooperation that should lead to higher levels of trust necessary for knowledge exchanges (Kang et al., 2003). Consequently, as knowledge sharing behaviors should be evaluated and rewarded, evaluation and compensation should focus on group and organizational-level outcomes rather than on individual outcomes (Cabrera and Cabrera, 2005). This supports the finding of our study in which knowledge sharing was not significantly related to selfappraisal, showing a correlation of 0.012. McMahon and Gunnigle (1994) argue that implementing self-appraisal would lead to more constructive and productive discussion about the central individual's performance than having the supervisor rate the subordinate's performance. Self-raters could give more accurate evaluations than their supervisors since they are more familiar with their own performance (Klimoski and London, 1974); however, self-appraisal is very likely to generate rating error, like leniency and halo errors (Fox et al., 1994). Participants in this study showed no clear and significant relation between appraising their selves and sharing knowledge within their organization. Upward appraisal showed also no significant correlation with knowledge sharing among employees in the Lebanese institutions. Numerous articles exist in the literature discussing the advantages and disadvantages of upward appraisal. Bettenhausen and Fedor (1997) propose that upward appraisal can increase employee participation and sense of importance in the company. Nevertheless, Bettenhausen and Fedor (1997) add that upward appraisal could be perceived as undermining supervisor's authority in the workplace.

# Limitations

An important limitation of this study was the sample size. It was mainly chosen from banking organizations operating in the Lebanese industry. The researchers overlooked the knowledge acquisition in this study which precedes the knowledge sharing in knowledge management. The relationship found in this study was correlational rather than causal.

## **Potential Contribution**

This research contributes to the previous performance appraisal and knowledge sharing literature as it tests empirically the association between kinds of performance appraisal and knowledge sharing in Lebanese banking sectors. At this point the researchers propose that Lebanese managers or leaders in the banking sectors practice the 360 degree appraisal method.

# **Managerial Implications**

There are numbers of implications of this study for managers/ leaders using 360 degree appraisal which results in enhancing knowledge sharing in an organization. First, this study will contribute to the body of knowledge by identifying the performance appraisal method used in an organization and by assessing its effectiveness and effect on knowledge sharing.

Our 6 variables model developed and validated can be studied and used by managers/leaders to enhance their knowledge capabilities within the banking sector. Moreover, the findings of this research provide guidance on how managers/leaders may use 360 degree appraisal to enhance knowledge sharing. As argued by London and Beatty (1993), 360 degree appraisal can build more effective work relationships.

## **CONCLUSION**

This study demonstrates that only the 360 degree appraisal has a significant impact on knowledge sharing in the Lebanese Banking sector. The regression analysis showed how the various kinds of performance appraisal can affect knowledge sharing within an organization. Yehya and Wee-Keat (2002) argued that performance appraisal should be the evaluation base of employee's knowledge management practices and an input for the direction of knowledge management efforts. The current study reinforces Yehya and Wee-Keat argument where knowledge sharing proved to be influenced by the kind of performance appraisal practiced in an organization. The path analysis could help the researchers to build a relationship between performance appraisal method and knowledge sharing practices in an organization. Finally, the researchers recommend additional qualitative and quantitative research in a wide variety of sectors where performance appraisal is regarded as an important tool for enhancing knowledge sharing and professional development of the employee which are important factors for the survival of the business in this competitive world.

## REFERENCE

Anon (1999). Anonymised personal communications from the two SGS tutors for the SA8000 lead auditor course, July, SGS, Camberley, UK.

Auteri, E. (1994). Upward Feedback Leads to Culture Changes. HR Magazine, Vol. 39, no. 6, 78-84.

Bartol, K. M. & Srivastava, A. (2002) "Encouraging Knowledge Sharing: The Role of Organizational Reward Systems" *Journal of Leadership and Organizational* 

Studies 9(1): 64-76.

Bell, L.A. (1988a). Management Skills in Primary Schools. London: Routledge.

Bell, J. (1993). Doing Your Research. Buckingham: Open University Press.

Bettenhausen, K.L. and Fedor, D.B. (1997), "Peer and upward appraisals: a comparison of their benefits and problems", *Group and Organization Management*, Vol. 22 No. 2, pp. 235-63.

Cabrera E.F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. International Journal of Human Resource Management, 16(5), May, 720-735.

Caruth, D., Noe III, R.M., & Mondy, R.W. (1988). Staffing Contemporary Organizations.

New York: Greenwood Press Inc.

Chaudhry, A.S., (2005). Knowledge Sharing in Asian institutions: a multi-cultural perspective from Singapore. World Library and Information Congress: 71th IFLA General Conference and Council. "Libraries – A voyage of discovery". August 14<sup>th</sup> – 18<sup>th</sup> 2005, Oslo, Norway.

Coolican H., (1996). Introduction to Research Methods in Statistics and Psychology, London: Hodder and Stoughton.

Corcoran, C. (2006). Performance Management Conducting Appraisals. Accountancy Ireland. December, Vol. 38, No. 6

Davis-Blake, A. & Hui, P.P.(2003) Contracting Talent for Knowledge-Based Competition.

In *Managing Knowledge for Sustained Competitive Advantage*. San Francisco, CA:

Jossey-Bass.

Dulebohn, J.H., Murray, B., & Ferris, G.R. (2004). The vicious and virtuous cycles of influence tactic use and performance evaluation outcomes. Organizational Analysis, 12, 53-74.

Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: the Toyota case. *Strategic Management Journal*, 21(3), 345–367.

Faraj, S. & Wasko, M.M. (2001). The Web of Knowledge: An investigation of Knowledge Exchange in Networks of Practice. Paper submitted for publication.

Fox, J., R. Kanter, S. Yarnasarn, M. Ekasingh, & R. Jones. 1994. Farmer decision making and spatial variables in northern Thailand. *Environmental Management* 18(3): 391-99

Gay, L.R. & Diehl, P.L. (1992). Research Methods for Business and Management. New York: Macmillan Publishing Company.

Gibson, J.L., Evancevich, J.M., & Donnelly, J.H. Jr. (1994). Organizations: Behavior, Structure, Processes (8<sup>th</sup> ed.) Burr Ridge Ill: Irwin Inc.

Gomez – Mejia L. R.; Balkin D. B.; Cardy R. L. (1995), Managing Human Resources, Englewood Cliffs, Prentice Hall.

Hsiu-Fen, L., & Gwo-Guang, L., (2006). "Effects of socio-technical factors on organizational intention to encourage knowledge sharing". Management Decision. Vol. 44, 74-88.

Janz, B.D., Colquitt, J.A. & Noe, R.A. (1997). Knowledge Worker Team Effectiveness: The Role of Autonomy, interdependence, Team Development, and Contextual Support Variables. Personnel Psychology, 50: 877 – 904.

Jones, Mary C., & Cline M., & Ryan S., (2006). Exploring Knowledge Sharing in ERP implementation: an Organizational Culture Framework. Decision Support Systems, Vol. 41, Issue 2, 411-434.

Kamp, D. (1994). Successful Appraisal in a Week. London: Hodder and Stoughton.

Kang, S, Chung, JH, Lee, JH, Fisher, GJ, Wan, YS, Duell, EA, Voorhees, JJ. (2003). Topical *N*-acetyl cysteine and genistein prevent ultraviolet-light-induced signaling that leads to photoaging in human skin *in vivo*. J Invest Dermatol 120:835–841

Katsanis, L.P, & Laurin J. G., & Pitta, D.A. (1996). How should product managers' job performance be evaluated in emerging product management systems? Journal of Product & Brand Management, Vol. 5, Issue 6, 5-23

Kempton, J. (1995). Human Resource Management and Development. New York: St. Martin's Press.

Kermally, S. (1997). Managing Performance. Oxford: Butterworth-Heinemann.

Klimoski, R.J., and M. London (1974). "Role of the Rater in Performance Appraisal,"

Journal of Applied Psychology, Vol. 59, 445-451

Lee, H. & B. Choi (2003). Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination." Journal of Management Information Systems 20(1): 179-228

Lengnick-Hall, M.L. & Lengnick-Hall, C.A. (2003). Human Resource Management in the Knowledge Economy: New Challenges, New Roles, New Capabilities. San Francisco, CA: Berrett-Koehler.

Levinson, H. (1991a). Thinking Ahead" in Appraising Performance Appraisal, Boston: Harvard Business Review PaperBack, pp.21-27.

Longenecker, C.O. (1989). Truth or Consequence: Politics and Performance Appraisal. Business Horizons, Nov/Dec, 76-82.

Longenecker, C.O. (1997). Why Managerial Performance Appraisals are Ineffective: causes and Lessons. Career Development Interntional. Vol 2 no 5, 212-218.

London, M., Beatty, R.W. (1993), "360 degree feedback as competitive advantage", Human Resource Management, Vol. 32.

McDermott, R. & O'Dell, C. (2001). Overcoming Cultural Barriers to Sharing Knowledge. Journal of Knowledge Management, 5(1): 76-75.

McGregor, D. (1957). An Uneasy Look at Performance Appraisal. Harvard Business Review, May-June, 89-94.

McGregor, D. (1990). "An Uneasy Look at Performance Appraisal" in Manage People, Not Personnel. Boston: Harvard Business Review, 155-165.

McIver, J.P. & Carmines, E.G. (1994). "Basic Measurements" in M.S. Lewis-Beck (Ed) International Handbook of Quantitative Applications in the Social Sciences. Vol. 4. London: Sage Publications, pp. 139-171.

McMahon, G. & Gunnigle, P.(1994). *Performance Appraisal: How to get it right*, Institute of Personnel Management (I), Productive Personnel Ltd., Dublin.

McNamara, C. (2005). Complete guide to ethics management: An ethics toolkit for managers. www.managementhelp.org/ethics/ethxgde.htm, accessed March 15, 2006.

Moffett, S., R. McAdam & S. Parkinson (2003). "An Empirical Analysis of Knowledge Management Applications." Journal of Knowledge Management 7(3): 6-26

Montgomery, D. (1991). Positive Appraisal: A Critical Review of Ten Years Work. Management in Education, vol. 5, no. 3, 41-45.

Moorhead, G., & Griffen, R. W. (1998). Organizational behavior: Managing people and organizations (5<sup>th</sup> ed.). Boston, MA: Houghton Mifflin.

Noe, R.A., Colquitt, J.A., Simmering, M.J. & Alvarez, S.A. (2003). Knowledge Management: Developing Intellectual and Social Capital. In Jackson, S.E., Hitt, M.A. and Denisi, A.S. (eds) Managing Knowledge for Sustained Competitive Advantage. San Francisco, CA: Jossey-Bass.

Nonaka, I. & Takeuchi, H. (1995). The Knowledge-Creating Company. Oxford University Press, New York, NY.

Oldham, G.R. (2003). Stimulating and Supporting Creativity in Organizations. In Jackson, S.E., Hitt, M.A. and Denisi, A.S. (eds). Managing Knowledge for sustained Competitive Advantage. San Francisco, CA: Jossey-Bass.

Robbins, S.P. (1998). Organizational Behavior: Concepts, Controversies, Applications (8<sup>th</sup> ed.) New Jersey: Prentice-Hall International, Inc.

Robbins, S.P. (2001). Organizational Behavior: Concepts, Controversies, Applications (9<sup>th</sup> ed.) New Jersey: Prentice-Hall International, Inc.

Reid, F. (2003). Creating a knowledge-sharing culture among diverse business units. Employment Relations Today, Vol. 30, Issue 3, 43-49.

Rowan, D. (1995). The Round Year. Management in Education, vol. 9, no. 4, 7-8.

Schermerhorn, J.R., Hunt, J.G., & Osborn, R.N. (1998). Basic Organizational Behavior. New York: John Wiley & Sons, Inc.

Scholtes, J. C. (1993). Neural Networks in Natural Language Processing and Information Retrieval. PhD thesis, Universiteit van Amsterdam, Amsterdam, Netherlands.

Vecchio, R.P. (1995). Organizational Behavior, (3<sup>rd</sup> ed.) Orlando: Dryden Press.

Yehya S., Goh W., (2002). Managing human resources toward achieving knowledge management. Journal of Knowledge Management. Dec, Vol. 6, no. 5, 457-468



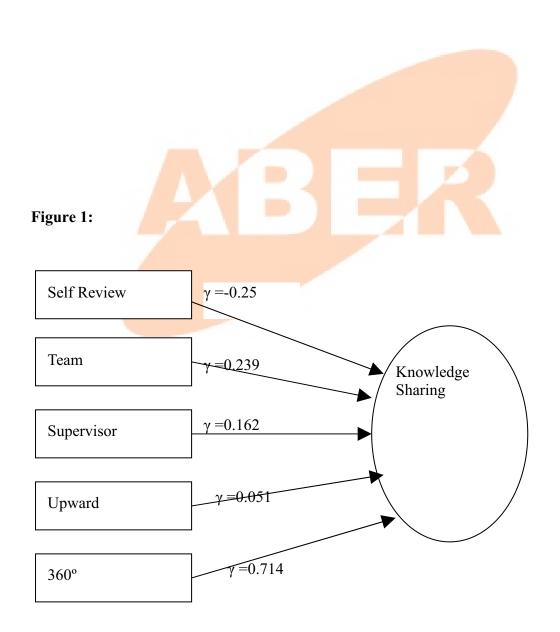
Table 1:

	Mean	Std.	Self	Superviso	Team	Upward	360	K.
		Dev	Review	r			Degree	Sharing
Self	3.190	1.235	1	.156*	044	.108	38**	25**
				, , , ,				
Review				.049	.584	.174	0.000	.002
Superviso	2.996	1.062		1	.24**	.358**	.097	.162*
r					.002	.000	.223	.041
Team	3.479	.8804			1	.304**	.103	.239**
						.000	.196	.002
Upward	2.981	1.055				1	06	.052

					.451	.516
360	4.259	1.050			1	.714**
Degree						.000
K.	4.001	.8910				1
Sharing						

Notes

- \*. Correlation is significant at the 0.05 level (2-tailed)
- \*\*. Correlation is significant at the 0.01 level (2-tailed)



 $\gamma$ = path coefficient

p< 0.01, sig at 0.001

