Employee Perceptions of Organizational Learning as Determinants of Affective Commitment in Knowledge Intensive Firms

Vijay Krishna and Andrea Casey The George Washington University

Despite considerable research on organizational commitment, a clear understanding of the process through which commitment develops has remained elusive. While there has been discussion in the literature about the possible relationship between organizational learning and organizational commitment, this paper develops a theoretical framework to support the relationship between organizational learning as an antecedent to organizational commitment and offers four propositions to expound on this relationship.

Keywords: Organizational Commitment, Organizational Learning

Organizational commitment has been extensively researched as an important factor in retaining and motivating employees and human resource management strategies have been proposed to develop organizational commitment. There has been considerable interest in organizational commitment construct due to its reported relationship with organizational efficiency and effectiveness (Beck & Wilson, 2000). In addition, a number of studies have shown a positive correlation between organizational commitment and job performance (Hunter & Thatcher, 2007; Pool & Pool, 2007). Meyer, Stanley, Herscovitch, and Topolnytsky (2002) in their meta-analysis found that affective commitment was negatively correlated with turnover and withdrawal cognition, absenteeism, work-family conflict and positively correlated with job performance and organizational citizenship behavior. Of all the forms of organizational commitment, affective commitment has shown the strongest correlation with desirable organizational outcomes and hence, organizations typically strive to foster this type of commitment among their employees (Meyer & Allen, 1997). Affective commitment is defined as an "employee's emotional attachment to, identification with, and involvement in the organizational" (Meyer & Allen, 1991, p.67).

Problem Statement

A review of the organizational commitment literature reveals that the relationship between organizational commitment and its antecedents has been inconsistent. According to Reichers (1985) "this literature is still characterized by a "laundry list" of significant antecedent or correlate variables" (p.467). Despite considerable research during the past four decades, Reichers' (1985) observation 'still' remains relevant. In a more recent review of the organizational commitment literature, the same conclusion was echoed by Meyer and Herscovitch (2001) who state, "Unfortunately, the research has been largely unsystematic (Mowday et al., 1982; Reichers, 1985) and as a result, we have few clear cut answers" (p.315).

One of the reasons for this lack of understanding is due to incomplete knowledge regarding the antecedents that influence commitment. Researchers in the past have suggested that the commitment literature could benefit significantly by exploring 'newer' antecedents to commitment (Decottis & Summers, 1987). Yet, a review of the commitment literature shows that very few studies have tested theoretically based alternate models of affective commitment (Mathieu & Zajac, 1990). In addition, research related to organizational commitment has emanated primarily from the psychological perspective with focus on individual level forces that bind an employee to his/her organization. The commitment literature in general has ignored the idea that organizational commitment is contextual. As a result, organizational level variables that are antecedents of organizational commitment have not received much attention in the organizational commitment literature. It is important to consider organizational level variables that impact the development of organizational commitment because commitment develops on account of both individual and organizational level forces (Cohen, 2003). The primary purpose of this research is to examine whether organizational learning, an organizational level construct, impacts the development of affective commitment as suggested in the related literature. The research problem to be addressed in this study is that although related literature has indicated that organizational learning impacts organizational commitment, the literature does not include any study that has examined the effect of organizational learning on organizational commitment. The context of this study is knowledge intensive industries. This category refers to firms where work is primarily of intellectual nature, performed by well educated and qualified personnel (Alvesson, 2000).

Copyright © 2008 Vijay Krishna & Andrea Casey

Review of Literature

The literature on organizational commitment and organizational learning was reviewed using the following computerized databases: Proquest Research Library Plus, Academic Search Premier, PsycINFO, JSTOR, ERIC, and Dissertation Abstracts International. The search terms that were used include organizational commitment and organizational learning, commitment and knowledge management, commitment and knowledge sharing, learning organization and commitment. The general time frame of the search spanned from 1980 to 2007.

Organizational Learning as a Determinant of Organizational Commitment

As the purpose of this paper is to propose an alternate model focusing on organizational level forces that impact the development of organizational commitment, this study draws on the work of Kanter (1968). Based on social action theory, Kanter (1968) proposed two factors that affect commitment to a social system, namely, the way a system is organized and phenomenological variables, such as, cognitive orientations, cathectic orientations, and evaluative orientations. Organizational learning significantly impacts both the way a system is organized and the phenomenological variables. For instance, if a firm is organized into smaller knowledge based units, then such arrangements will result in higher employee interaction and involvement (Brooks, 2002). High involvement with all the members of a system (cognitive orientation) will lead to gratification and increase the affective ties with the system (Kanter, 1968). Theorists and researchers in the field of knowledge management have also talked about the relationship between knowledge sharing and commitment. "As Polanyi noted, 'commitment' underlies human knowledge creation activities. Thus, commitment is one of the most important components for promoting the formation of new knowledge within an organization" (Nonaka, 1994, p.17). It has been suggested that participation in knowledge sharing activities could impact organizational commitment (Hislop, 2003). Even though there have been several references regarding the impact of organizational learning on affective commitment, no study has developed a theoretical framework to relate these two constructs. Drawing from the works of different researchers, the next part of this paper presents a conceptual framework of the relationship between organizational learning and affective commitment and offers theoretical and empirical evidence to support this relationship.

Conceptual Framework of the Relationship between Organizational Learning and Affective Commitment

This section develops a conceptual framework of the relationship between organizational learning and affective commitment. The first part of the section introduces the organizational commitment construct. This is followed by a brief description of a theoretical model of organizational learning. Theoretical and empirical research to support the proposed relationship between organizational learning and organizational commitment is presented next. *Organizational Commitment*

Kanter (1968) viewed commitment as the willingness of social actors to give energy and loyalty to the organization. Mayer and Allen (1991) classified various conceptualizations of organizational commitment into three types, namely, affective attachment to the organization (affective commitment), perceived costs associated with leaving the organization (continuous commitment), and a moral obligation to remain with the organization (normative commitment).

Organizational Learning

Organizational learning has been defined to include the process of detection and correction of errors (Argyris & Schon, 1978) and improving actions through better knowledge and understanding (Fiol & Lyles, 1985), intentional use of learning processes to transform the organization (Dixon, 1999), and as the process of change in thought and action (Crossan, Lane, & White, 1999). Schwandt (1993) defines organizational learning as "a system of actions, actors, symbols, and processes that enables an organization to transform information into valued knowledge which in turn increases its long-run adaptive capacity" (Schwandt & Marquardt, 2000, p. 8).

After a review of major organizational learning theories, the Schwandt and Marquardt's (2000) sociological model of organizational learning systems model (OLSM), grounded in Parsons' (1951) general theory of action, was selected as the theoretical lens for organizational learning. The primary reason for choosing this model is because this model presents organizational learning from a social action perspective to understand collective organizational behavior. This aligns with the purpose of this paper--that is, to examine the development of organizational commitment as a context-related phenomenon from a multi-dimensional perspective.

The following section provides a brief description of the four subsystems of organizational learning that characterizes the OLSM.

The environmental interface subsystem: The portal for new information. The primary function of this subsystem is to seek, scan and screen information from both within and outside the organization (Schwandt & Marquardt, 2000). The output of the environmental interface system is new information.

The action/reflection subsystem: The dynamics of knowledge creation. This subsystem is at the heart of the organizational learning process. "The action/reflection subsystem describes the organization's actions and examines those actions that enable it to assign meaning to new information, and in doing so creates goal reference knowledge" (Schwandt & Marquardt, 2000, p.118).

The dissemination and diffusion subsystem: Knowledge and the organizational social fabric. "The purpose of this system is to move, transfer, retrieve, and capture information and knowledge." (Schwandt & Marquardt, 2000, p.155). Dissemination refers to the formal processes using formal channels of communication to share knowledge, whereas diffusion refers to the informal processes using informal channels of communication to share knowledge. The output of the dissemination/diffusion subsystem is structuring. Structuring refers to the "integration of organizational structures, roles, norms, and objects and processes that provide a dynamic quality called "structuring" (Schwandt & Marquardt, 2000, p.156).

The meaning and memory subsystem: The essence of the learning system. This subsystem consists of the mechanism to store and retrieve information. The values and assumptions that are part of an organization's culture constitute its memory that significantly impacts organizational learning (Schwandt & Marquardt, 2000). The output of the meaning and memory subsystem is sensemaking. Sensemaking involves the process through which the collective assigns meaning to its actions.

Organizational Learning Systems Model and Affective Commitment

This study draws theoretical support to relate OLSM and affective commitment from the work of Nonaka (1994) who identified three basic factors that produce commitment in the workplace, namely, intention, autonomy, and environmental fluctuations. Intention refers to the manner in which people form their approach to the world and make sense of their environment. Autonomy refers to the extent to which individuals can carry out their activities with minimal supervision. Fluctuation refers to the ambiguity, redundancy, noise, or randomness that is generated by the organization and its environment. The OLSM subsystems impact the development of organizational commitment by influencing these three commitment producing factors. The meaning and memory subsystem reflects an organization's values and assumptions about people. Organizations with a strong culture for learning (meaning & memory) tend to provide autonomy to employees to carry out their tasks. Existing research that has examined the affect of autonomy on organizational commitment has found positive correlation between these two constructs (Meyer & Allen, 1997). The environmental interface subsystem has direct implication for environmental fluctuation. The activities directed at environmental interface will raise employees' awareness through generation of new information about a rapidly changing environment. Information reduces uncertainty and helps to understand, predict, and control the environment (Morrison, 1993). New information, the interchange media of external interface, is likely to develop commitment among employees through reduction in fluctuations. Employees are more likely to be committed to an organization where they experience a lesser degree of ambiguity, redundancy, noise or randomness. The action/reflection subsystem is related to employee's intention. Action/reflection a dynamic oriented subsystem provides mechanism for questioning, reflection, and feedback. The action/reflection subsystem impacts the way employees approach the world and their sensemaking capabilities. By influencing employees' sensemaking capabilities, the action/reflection system will in turn affect employees' intention. The diffusion/dissemination subsystem is likely to impact fluctuations. Organizational actions aimed at dissemination and diffusion will impact the amount of information available to employees to negotiate changes in the external environment. By ensuring availability of adequate information to all the employees, this subsystem will help employees to experience a lesser degree of fluctuation, which in turn will affect their commitment.

An important study that provides empirical support to link OLSM to organizational commitment was conducted by Ng et al. (2006), who found a significant positive correlation between opportunity for learning, work schedule flexibility, management communication and organizational commitment. The variables that were researched by Ng et al. (2006) as antecedents to organizational commitment are closely related to the OLSM subsystems. Management communication was defined in terms of transmission of information regarding organizational goals; this definition closely approximates the definition of information dissemination/diffusion. Opportunity for learning is closely related to the meaning and memory subsystem because organizations with strong cultures for learning provide continuous opportunity for employee learning and development. Work schedule flexibility approximates Nonaka's (1994) concept of autonomy and is part of the organization's culture (meaning & memory).

The Meaning and Memory Subsystem and Affective Commitment

In this paper, organizational learning culture is defined as a culture that values employee development. Such cultures provide continuous learning opportunities to their employees. As learning in workplace involves experimentation, risk taking, and creative exploration, organizations with strong cultures for learning provide employees with autonomy to carry out their tasks.

Numerous studies have shown that organization culture impacts organizational commitment. Way et al. (2007) found a significant positive correlation between the manager's perceptions of organizational culture (emotional climate, practice issues, and empowerment) and organizational commitment. With the growing importance of learning in workplace, opportunity for learning is becoming an important determinant of employee attitude and behavior (Lankau & Scandura, 2002 as cited in Ng et al., 2006). Ng et al. in their study found a significant positive correlation between opportunity for learning and organizational commitment. The findings of these studies indicate that organizations that have cultures that promote learning, experimentation, risk taking, and autonomy tend to have higher levels of affective commitment.

Based on the theoretical and empirical support that exits to relate meaning and memory subsystem (that represents an organization's culture) and organizational commitment, the following proposition is offered:

Proposition 1: There is a significant positive relationship between the meaning and memory subsystem as defined by the OLSM model and affective commitment. The meaning and memory subsystem predicts the level of affective commitment of employees in knowledge intensive firms.

The Information Dissemination/Diffusion Subsystem and Affective Commitment

Drawing from the writings of different theorists, the following reasons are offered to relate information/dissemination to affective commitment. First, information sharing impacts the development of affective commitment by creating 'common perspectives' among the organizational members (Nonaka, 1994). The actions directed at information dissemination/diffusion will necessitate a high degree of interaction among the employees, which in turn will promote greater affective attachment to the organization. Second, information dissemination/diffusion will provide employees a sense of security by reducing the fluctuations in the environment. Morrison's (1993) research on the newcomer information seeking on the socialization process offers theoretical explanation as to why information dissemination/diffusion influences employees' affective commitment. According to Morrison (1993) the process of socialization involves learning and adjustment, both of which are dependent on information. Given the rapid changes taking place in the environment of an organization, the level of insecurity experienced by employees in general has increased. The information dissemination/diffusion subsystem is likely to impact the development of commitment by making information available to employees to negotiate the fluctuations in the environment. Third, employee satisfaction with the quantity of information available to them fosters a feeling of belongingness and identification with the organizational values and goals (Putti, Aryee, & Phua, 1990). If, on the other hand, employees do not have access to sufficient information to perform their tasks, they are likely to feel frustrated and alienated. The dissemination/diffusion subsystem will impact employee satisfaction with the quantity of information by ensuring information availability through out the organization.

Empirical support for the proposed relationship between information dissemination/diffusion and affective commitment can be found in the organizational communication literature. Chen, Silverthorne, and Hung (2006) found a significant positive correlation between organizational communication, defined as the degree to which job related information was transmitted by the organization to its members and among the members of the organization and organizational commitment. Putti, Aryee, and Phua (1990) examined the effect of Communication Relationship Satisfaction (CRS) on organizational commitment. CRS was defined as the extent to which an employee's request for information matches the availability of information. This study found a significant positive correlation between CRS and organizational commitment. Based on the findings of this study, it can be inferred that employee satisfaction with the availability of information creates a feeling of belongingness and identity with the organization resulting in high organizational commitment. Hence, it is proposed that organizational activities that increase the availability of information are likely to have a positive effect on affective commitment.

Empirical support to relate information dissemination/diffusion with affective commitment can also found in the organizational identity literature. Smidts, Pruyn, and Riel (2001) examined the impact of employee communication on organizational identity. In this study organizational identity, a concept that is closely related to organizational commitment was defined as a sense of one-ness with the organization (Ashforth & Mael, 1989, as cited in Smidts, Pruyn, & Riel, 2001). This study found that the content of communication (information on organizational issues) and information about their personal roles) leads to stronger employee identification.

On the basis of theoretical and empirical support to relate information diffusion/dissemination to affective commitment, the following proposition is offered.

Proposition 2: There is a significant positive relationship between information dissemination/diffusion and affective commitment. The information dissemination and diffusion subsystem will predict the level of affective commitment of employees in knowledge intensive firms.

The Action/Reflection Subsystem and Affective Commitment

In this study, it is proposed that action/reflection subsystem impacts employee's affective commitment through four ways. First, the action/reflection subsystem influences an employee's intention, a factor that has been linked to commitment in the workplace (Nonaka, 1994). Action/reflection impacts the way employees approach the world and their sensemaking capabilities. This in turn impacts the way the employees form their approach to the world and make sense of their environment (intention). Second, the principal means by which reflection can be implemented in organization is through the process of feedback (Lawlor, 1998). The job characteristics theory states that providing employees with feedback acts as an intrinsic motivating factor (Eby, Freeman, Rush, & Lance, 1999). Third, the process of action/reflection subsystem creates conditions that support the development of reflective competencies of the employees. Fourth, the social structures that are created in the organization to focus on the process of action/reflection through shared practices create a strong bonding among the members. The bonding that occurs among organizational members through participation in the process of action/reflection leads to higher affective attachment with the organization.

Empirical support to relate action/reflection with affective commitment can be found in the longitudinal qualitative study carried by Clarke, Anderson, Thorpe, and Gold (2006) involving 100 Small and Medium Enterprises (SME) in north-west of England that were involved in an action learning project. SME were chosen for this study as it has been established in the literature that SME owner managers are action oriented, consequently, much of their learning, is context driven and experiential (Rae & Carswell, 2002 as cited in Clarke, Anderson, Thorpe, & Gold, 2006). The focus of this study was to implement and evaluate the effect of action learning which involves action, reflection, and emphasis on the social aspects of learning (Revans, 1980) on SME owner manager development. The important finding of this study was that participation is collective action and reflection helped participants to form networks and alliances that resulted in the development of strong social capital among them. It is evident from this study that participation in collective action and reflection helped participants to develop stronger bonding and attachment to the collective. This inference also resonates with the work of Lave and Wenger (1991) and community of practice. Learning has emerged as a social process rather than an individual one and is regarded as the primary means of socialization.

It is evident from the previous discussion that both theoretical and empirical support exits to relate action/reflection subsystem to organizational commitment. Based on the premise that action/reflection subsystem impacts employee learning and development (reflective and sensemaking capabilities) and promotes the development of social capital among employees, the following proposition is offered:

Proposition 3: There is a significant positive relationship between action/reflection and affective commitment. The action/reflection subsystem will predict the level of affective commitment of employees in knowledge intensive firms. The Environmental Interface Subsystem and Affective Commitment

Fluctuation in environment is one of the factors that induce employee commitment in an organizational setting (Nonaka, 1994). Environmental fluctuation often triggers breakdown in human perceptions, which in turn provides individuals an opportunity to asses their fundamental thinking and beliefs: "This process necessarily involves deep personal commitment by the individual" (Nonaka, 1994, p.18). It is proposed that the environmental interface subsystem will impact the development of affective commitment by influencing fluctuation. Participation in seeking and scanning new information heightens employees' awareness regarding what is happening in the external and internal environment (Schwandt & Marquardt, 2000). Information reduces uncertainty (Berger, 1979; Berlyne, 1960; Lanzetta, 1971 as cited in Morrison, 1993) and helps to understand, predict, and control the environment (Morrison, 1993). New information, the interchange media of external interface is likely to develop commitment among employees through reduction in environmental fluctuations.

Morrison's (1993) research on the newcomer information seeking in the socialization process offers empirical support to relate environmental interface subsystem to affective commitment. The findings of this study showed a significant positive correlation between information seeking and the three dependent variables, namely, satisfaction, performance, and intention to leave an organization. Although the purpose of Morrison's (1993) research was to demonstrate the relationship between information seeking and socialization in the context of new employees, its implication extends to the existing employees as well. Given the rapid changes taking place in the environment of an organization, the level of insecurity experienced by employees in general has increased. On account of these changes the role of the environmental interface subsystem has become particularly important. Employees' participation in environmental scanning activities will increase the amount of information available to them to deal with change. Further, availability of new information will help to reduce the level of equivocality that is often

associated with management of change. It is postulated that environmental interface subsystem by increasing employees' awareness of the environment, will help them to effectively deal with change, which, in turn, will foster higher commitment to the organization. The following proposition emerges from the previous discussion on environmental interface subsystem and affective commitment.

Proposition 4: There is a significant positive relationship between environmental interface subsystem and affective commitment. The environmental interface subsystem will predict the level of affective commitment of employees in knowledge intensive firms.

Synergetic Effects

It is postulated that the presence of all the four organizational learning subsystems will have a synergetic effect on organizational commitment. Support for this reasoning can be found in the systems approach that is central to the OLSM. As is evident from the previous discussion on OLSM, the output of one subsystem forms the input of the other subsystem. Therefore, when all the subsystems are performing optimally, it will have a synergetic effect. Based on the above reasoning, the following proposition is presented:

Proposition 5: Employee perception of organizational learning as measured by the four organizational learning subsystems, namely, environmental interface, action/reflection, memory/meaning, and dissemination/diffusion will predict affective commitment of employees in knowledge intensive firms.

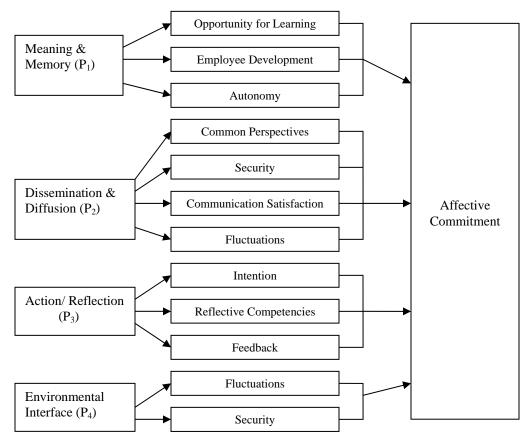


Figure 1: Conceptual framework of the relationship between organizational learning and affective commitment. (*Note:* P₁, P₂, P₃, and P₄ refer to propositions 1 to 4).

Discussion

This paper provides a theoretical framework to link two constructs that significantly impact organizational behavior. While there has been some discussion in the literature about the possible relationship between organizational learning and organizational commitment, this paper provides insights into how organizational learning processes impact organizational commitment.

One of the main challenges organizations are facing today concerns motivating employees to carryout broader and proactive roles. The current workforce is becoming more emergent and less traditional. An emergent workforce is driven by opportunity as against a traditional work force that believes that tenure dictates growth (Campbell, 2002). Hence, organizations will need to provide growth and learning opportunities in order to retain an emergent workforce. In many ways, "the use of knowledge in organizations is largely a discretionary behavior that can be encouraged but not demanded by organizations and their managers" (Kelloway & Barling, 2000, p. 288). Under the impossibility of controlling and enforcing compliance centered behavior, organizations are 'forced' to move away from a 'prescription' centered paradigm of managing employees to a developmental paradigm of leading emergent role behaviors among their employees. Organizations will have to employ newer strategies to foster commitment among an emergent workforce. In the light of above observations, organizational learning processes that focus on information dissemination/diffusion, environmental interface, action/reflection, and meaning/memory can serve as significant antecedent to organizational commitment.

Conclusion, Implications and Suggestions for Future Research

With the growing importance of workplace learning, organizational learning is fast becoming a significant determinant of employeee attitude and behavior. However, the impact of organizational learning has traditionally been associated with organizational success, effective knowledge management, and financial performance (Yang, 2003) and very little research has examined the effect of organizational learning on employee behaviour and commitment. This paper provides a theoretical framework to link two constructs that significantly impact organizational behavior, namely, organizational learning and organizational commitment. The proposed theoretical framework can facilitate research that seeks to understand the impact of learning in workplace on employee commitment. This study also seeks to contribute to management practices by considering important organizational learning processes that influence employee commitment. The model that is presented in this paper looks at organizational commitment from a Human Resource Development (HRD) perspective. By viewing organizational learning as a commitment producing strategy, this paper moves away from the traditional ways of fostering organizational commitment, namely, compensation, benefits, assessments and promotion, to a learning and development perspective. The HRD professionals can use organizational learning as a strategy to develop a workforce that is committed to the organization's values and objectives.

References

- Alvesson, M. (2000). Social identity and the problem of loyalty in knowledge intensive companies. *Journal of Management Studies*, 37(8), 1101-1123.
- Argyris, C., & Schon, D. (1978). Organizational learning: A theory of action perspective. Reading, MA: Addison Wesley.
- Beck, K., & Wilson, C. (2000). Development of affective organizational commitment: A cross-sequential examination of change with tenure. *Journal of Vocational Behavior*, 56(1), 114-136.
- Brooks, G. (2002). Knowledge based structures and organizational commitment. *Management Decision*, 40(6), 566-573.
- Campbell, B (2002). The high cost of turnover: Why holding on to your employees can improve your bottom line. *Black Enterprise*, 33(5), 61.
- Chen, J., Silverthorne, C., & Hung, J. (2006). Organizational communication, job stress, organizational commitment, and job performance of accounting professionals in Taiwan and America. *Leadership & Organizational Development Journal*, 27(4), 242-249.
- Cohen, A. (2003). Multiple commitments in the workplace: An integrative approach. Mahwah, NJ: Lawrence Erlbaum.
- Clarke, J., Thorpe, R., Anderson, L., & Gold, J. (2006). It's all action, it's all learning: action learning in SMEs. *Journal of European Industrial Training*, 30(6), 441-455.
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *The Academy of Management Review*, 24(3), 522-537.
- Decotiis, T. A., & Summers, T. P. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. *Human Relations*, 40(7), 445-470.
- Dixon, N. (1999). The organizational learning cycle: How we can learn collectively (2nd Ed.). Brookfield, VT: Gower.

- Eby, L. T., Freeman, D. M., Rush, M. C., & Lance, C. E. (1999). Motivational bases of affective organizational commitment: A partial test of an integrative theoretical model. *Journal of Occupational and Organizational Psychology*, 72(4), 463-483.
- Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. Academy of Management Review, 10(4), 803-813.
- Hislop, D. (2003). Linking human resource management and knowledge management via commitment: A review and research agenda. *Employee Relations*, 25(2), 182-202.
- Hunter, L. W. & Thatcher, S. M. (2007). Feeling the heat: Effects of stress, commitment, and job experience on job performance. *Academy of Mangement Journal*, *50*(4), 953-968.
- Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. *American Sociological Review*, 33(4), 499-517.
- Kelloway, E. K., & Barling, J. (2000). Knowledge work as organizational behavior. *International Journal of Management Reviews*, 2(3), 287-304.
- Mathieu, J. E., & Zajac, D. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171-194.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *I*(1), 61-98.
- Meyer, J. P., & Allen, N. J. (1997). Commitment in the workplace: Theory, research, and application. Thousand Oaks, CA: Sage.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resources Management Review*, 11(3), 299-326.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitments to the organizations: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20-52.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organizational linkages: The psychology of commitment, absenteeism, and turnover.* New York: Academic Press.
- Morrison, E. W. (1993). New comer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal*, *36*(3), 557-589.
- Nonaka, I. (1994). A dynamic theory of knowledge creation. Organization Science, 5(1), 14-37.
- Ng, T. W. H., Butts, M. M., Vandenberg, R. J., DeJoy, D. M., & Wilson, M. G. (2006). Effects of management communication, opportunity for learning, and work schedule flexibility on organizational commitment. *Journal of Vocational Behavior*, 68(3), 474-489.
- Parsons, T. (1951). The Social System. Glencoe, IL: The Free Press.
- Pool, S. & Pool, B. (2007). A management development model: Measuring organizational commitment its impact on job satisfaction among executives in a learning organization. *Journal of Management Development*, 26(4), 353-369.
- Putti, J. M., Aryee, S., & Phua, J. (1990). Communication relationship satisfaction and organizational commitment. *Group & Organizational Studies*, *15*(1), 44-52.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review*, 10(3), 465-476.
- Revans, R. (1980). Action learning: New techniques for management. London: Kogan Page.
- Schwandt, D. R., & Marquardt, M. J. (2000). *Organizational Learning: from world-class theories to global best practices*. Boca Raton, FL: St. Lucie Press.
- Smidts, A., Pruyn, A. H., & Riel, C. B (2001). The impact of employee communication and perceived external prestige on organizational identification. *Academy of Management Journal*, 49(5), 1051-1062.
- Way, C., Gregory, D., Davis, J., Baker, N., LeFort, S., Barrett, B., & Parfrey, P. (2007). The impact of organizational culture on clinical managers' commitment and turnover intention. *The Journal of Nursing Administration*, 37(5), 235-242.
- Yang, B. (2003). Identifying valid and reliabe measures for dimensions of a learning culture. *Advances in Developing Human Resources*, 5(2), 152-162.