



# The relationship between high-commitment HRM and knowledge-sharing behavior and its mediators

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## Abstract

**Purpose** – The purpose of this study is to investigate the relationship between high-commitment human resource management and individual knowledge-sharing behavior. Furthermore, the mediating factors that link the relationship are examined.

**Design/methodology/approach** – The structural equation model was applied to test eight hypotheses by means of a survey of 198 practitioners.

**Findings** – High-commitment human resource management was positively related to perceived organizational support. Perceived organizational support was positively associated with organizational trust and organizational commitment. Organizational commitment was positively related with knowledge-sharing behavior. Perceived organizational support and organizational commitment mediated the relationship between high-commitment human resource management and knowledge-sharing behavior.

**Research implications** – First, enterprises can foster knowledge-sharing behavior by adopting high-commitment HRM. Second, when employees perceive organizational support, they generate organizational commitment and then perform knowledge-sharing behavior, benefiting the organization.

**Originality/value** – From the perspectives of social exchange and social identity, this study demonstrated how high-commitment HRM practices dominate knowledge-sharing behavior via perceived organizational support and organizational commitment.

**Keywords** Human resource management, Perceived organizational support, Organizational commitment, Organizational trust, Social exchange theory, Social identity theory, Knowledge management, Job commitment, Taiwan

**Paper type** Research paper



## Introduction

In an economy characterized by intense global competition and the rapid delivery of quality goods and services, knowledge has increasingly become an extremely important source of a firm's competitiveness, because it can strengthen the firm's core competencies and provide resources necessary for a firm to innovate and compete

(Bollinger and Smith, 2001; Teece, 1998). In leveraging this critical resource to enhance the firm competitiveness, knowledge management (hereinafter labeled KM) has gained attention from many organizations and has been deemed a major activity in recent years. The recent upsurge of KM activities in firms has also garnered the research interest of management scholars.

Research in the KM field primarily focuses on strategic implications of KM, its processes and the applications of information technologies in KM processes. Drawing on a knowledge-based view of firms, strategic management studies determined that knowledge is the most important strategic asset that can sustain a firm's competitive advantage (Grant, 1997; Teece, 1998). Studies focusing on KM processes and information technologies excessively stress the operational and technological aspects of KM (Bollinger and Smith, 2001), thereby neglecting the different aspects of KM processes that are related to the behavior of individual knowledge workers in an organization. Excessive emphasis on technological aspects has led to poor KM in organizations. Thus, increasing numbers of scholars have argued that issues related to people management in organizations (e.g. attitude and motivation) should garner increased attention in KM research and practices (Ruggles, 1998).

Although there has been a call for increased attention on people management issues in KM, studies have focused on conceptual and theoretical discussions of different aspects of KM, such as systems, cultures, and organizational design (Cohen, 1998; Hargadon, 1998), whereas some studies merely presented anecdotal evidence. However, systemic empirical research has not been applied to examine the relationships between people management and individual knowledge-sharing behavior (McMahan *et al.*, 1999).

Prior researches about KM excessively stress the operational and technological aspects of KM; however, people management (e.g. human resource management) is the approach that truly contributes to KM (e.g. knowledge sharing). Therefore, it is important for researchers to explore the relationship between people management and knowledge sharing. This study fills this research gap by investigating the relationship between high-commitment human resource management (hereinafter labeled high-commitment HRM) and individual knowledge-sharing behavior. Mediating roles of perceived organizational support, organizational trust, and organizational commitment are discussed to clarify the relationship between high-commitment HRM and knowledge-sharing behavior. In the next section, this study presents literature review, hypotheses and research framework. Then, this study presents the methodology and statistical results. Finally, implications, contributions, limitations and future studies are also discussed.

## Literature review and hypotheses

### *High-commitment human resource management*

According to studies of strategic HRM, the content of HRM practices can be divided into "low cost" and "high commitment" (Becker and Gerhart, 1996; Delery and Doty, 1996; Youndt *et al.*, 1996). Low-cost HRM focuses on operation efficiency and cost reduction. Therefore, low-cost HRM adopts a formal control system; employees have clear job descriptions and obtain limited training. Compared to low-cost systems, enterprises that adopt high-commitment HRM orientate the strategy as the innovative

issues. Therefore, these firms must obtain talented employees and encourage employees to reach innovative goals. Enterprises must adopt HRM that can attract and encourage innovative talent and enhance the commitment of professions. Thus, the primary focus of talent selecting is to hire those with comprehensive abilities that meet innovation needs (Delery and Doty, 1996). Additionally, comprehensive job designs are aimed at enhancing employee technological abilities and their professional abilities (Becker and Gerhart, 1996).

Whitener (2001) asserted that the practices of HRM can be divided into “control” and “commitment”, where control focuses on norms, supports, rewards, and monitoring of employee behavior, and commitment focuses on encouraging employees to identify organizational goals, and working hard to enhance productivity and efficiency. High-commitment HRM is a high-commitment strategy affecting employee commitment and motivation (Whitener, 2001), including employment practices, appraisal, competitiveness, fair compensation, comprehensive training and development, each of which focuses more on training and development than low-cost strategies (Youndt *et al.*, 1996). In addition to providing formal training for employees, enterprises emphasize comprehensive learning and KM to cultivate innovative ability (Snell and Dean, 1992). On the one hand, enterprises focus on team cooperation to accumulate society capital. On the other hand, enterprises largely focus on developments and needs of talents through providing channels of training and development (Whitener, 2001).

#### *Knowledge-sharing behavior*

Knowledge sharing contributes to the creation and utilization of knowledge, and therefore has an important role in the process of KM. Although KM is composed of knowledge adoption, knowledge coding, knowledge storage, knowledge sharing, and knowledge utilization, knowledge sharing is the most important. Sufficient knowledge sharing causes organization members to gather knowledge more conveniently and rapidly, organization members recreate and use knowledge by sharing knowledge to enhance KM performance. Knowledge sharing can facilitate organizational innovation, core capability (Gold *et al.*, 2001), competitive advantage (Teece, 1998). Knowledge creation typically occurs through the exchange and integration of knowledge elements (Nahapiet and Ghoshal, 1998). When the quality and speed of exchange and integration of knowledge elements are higher, the quality and quantity of knowledge creation are higher. When organizations provide appropriate encouragement that facilitates knowledge and intelligence sharing, it can create a massive growth of knowledge. Thus, knowledge, especially tacit knowledge, which is the most important organizational resource, can become the primary source of competitive advantage because knowledge is difficult to imitate. However, tacit knowledge is possessed and stored in individuals, not in an organization (Kim and Mauborgne, 1998). The importance of employee knowledge-sharing behavior can be further elucidated by using the following perspectives.

First, because tacit knowledge is generally embodied in individuals, transmitting such knowledge through formalization is difficult (Polanyi, 1966). Intuited knowledge, such as cognitive and experienced skills, is difficult to be expressed orally. Therefore, organizations confront difficulties when attempting to dominate employee

knowledge-sharing behavior. As the amount of tacit knowledge increases, the degree of knowledge asymmetry increases, revealing knowledge to be the most important asset in the era of knowledge economy. Employees can either code and store important knowledge in organizational databases or share knowledge with others, and such sharing can cause internal conflict between an organization and employees. That is, the distribution of personal knowledge reduces the rareness of knowledge that influences employee privileges in an organization (Willman *et al.*, 2001). Conversely, knowledge itself, which is not the nature of depreciation, will not depreciate after using or sharing; on the contrary, knowledge can be extended limitlessly. In other words, knowledge can generate synergy and be extended limitlessly with infinite potential through unceasing learning and interaction. To summarize, knowledge, which is intangible and tacit, is regarded as a strategic asset for maintaining power, status, and competitive advantage; therefore, organizations should further identify the factors that influence employee knowledge-sharing behavior.

Many studies determined that employee knowledge-sharing behavior could be predicted by factors, such as organizational justice (Kim and Mauborgne, 1998), trust (Andrews and Delahaye, 2000), organizational commitment (Hislop, 2003), and HRM (Robertson and O'Malley Hammersley, 2000). However, these studies are generally exploratory, focusing on case studies for theory development, and need quantified studies. Moreover, previous research didn't examine the relationships among HRM, perceived organizational support, organizational trust, organizational commitment, and knowledge-sharing behavior. Therefore, it is necessary for researchers to fulfill the gap.

#### *Social exchange theory and social identity theory*

Social exchange can be defined as "an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons" (Blau, 1964). Many scholars have investigated different issues associated with social exchange theory (Eisenberger *et al.*, 1990; Tekleab and Taylor, 2005). For example, Aselage and Eisenberger (2003) proposed three similar perspectives that share a common foundation in social exchange theory. First, in the development of an exchange relationship between employees and an organization, exchanging valued socio-emotional resources is important. Second, the contributions from one party to another are valuable in the exchange relations. Third, procedural justice is regarded as an important antecedent of the relationship between high-quality employees and an organization. Furthermore, when employees perceive organizational support (POS), the relationship between employees and an organization will change. That is, high-quality POS will make employees less likely to notice discrepancies in organizational commitment, and make those employees who do notice discrepancies willing to give an organization the benefit without the doubt (Aselage and Eisenberger, 2003). Wayne *et al.* (1997) utilized perspectives of social exchange theory to investigate the role of POS between leaders and members. Based on the results, the relationships between leaders and members are positively related to organizational citizenship behavior and organizational performance. That is, employees who regard advantages offered by leaders as exchangeable conditions work well, thus contributing to organizational outcomes.

As argued by Hogg and Terry (2000), social identity theory is regarded as “a platform from which to describe in detail how social categorization and prototype-based depersonalization actually produce social identity phenomena.” The core concept of social identity is that people define themselves, not only in terms of personal attributes, but also in terms of collective attributes (Van Knippenberg and Hogg, 2003). The personal attributes delineate employees’ personal identity and personal self and collective attributes of an organization delineate employees’ social identity and collective self. From the empirical evidence, leaders can positively affect employees’ social identity contributing employee creativity (Hirst *et al.*, 2009), indicating that employee social identity is affected by organizational practices (e.g. leadership and HRM).

Employees who have different identity orientations will have different relationships in social exchange. Flynn (2005) argued that employees with different identity orientations generate different social exchange relationships, including negotiated exchange produced by personal identity orientation, reciprocal exchange produced by relational identity orientation, and generalized exchange generated by collective identity orientation. Employees who have a personal identity orientation focus on tangible benefits gained from participating in an exchange, rather than social rewards. Employees who are in an interdependent task environment are provided a means for obtaining cooperation via reciprocal exchange. Employees at the relational level are self-interested, and motivated to produce benefits for another party in the exchange relationships. Therefore, employees who have a relational identity orientation prefer reciprocal exchange to other exchange forms. In organizations, employee extra-role behavior is compatible with generalized exchange behavior (e.g. organizational citizenship behavior). When employees have a collective identity orientation, they will perform altruistic behavior and prefer interacting with others in the form of generalized exchanges.

According to the above-mentioned viewpoints, different relations between employees and an organization can be interpreted by using social exchange theory and social identity theory. It reveals that the relations between the organization and employees are affected by important factors, such as HR practices, leadership, perceived organizational support, organizational trust, and organizational commitment.

#### *The relationship between high-commitment HRM and POS*

There is an inducement-contribution relationship between the employees and an organization. It is the reason that an organization adopts high-commitment HRM to offer employees comprehensive training, development, rewards, information sharing, and job security (Huselid, 1995). Therefore, employees may consider high-commitment HRM as a supportive means from organizations.

An organization which approves employee contributions support employees, revealing that positive relationships exist among promotion, developed experience, and POS (Allen *et al.*, 2003). In fact, employees do not always sense organizational intentions, it is important for the organization to make employees sense HRM practices (Whitener, 2001; Allen *et al.*, 2003). Whitener (2001) argued that the organization may adopt a high-commitment strategy, including employment practices, appraisal,

competitiveness, fair compensation, and comprehensive training and development in order for employees to have high commitment and motivation. Allen *et al.* (2003) also identified antecedents, including employee participation in decision-making, rewards fairness, and chances for development, which affect POS. According to social exchange theory, Flynn (2005) argued that employees with relational identity orientation prefer reciprocal exchange, i.e. these employees may reciprocate an organization when they are in an interdependent task environment. That is, organizations adopt high-commitment HR practices making employees perceive organizational support and feel that they are important in the interdependent organization. Based on social identity theory, employees who feel they are appreciated by their organization may perceive high status in the organization (Fuller *et al.*, 2003). It reveals that an organization can utilize high-commitment HRM to make employees feel that they are valuable and then perceive organizational support. Therefore, high-commitment HRM is a good strategy for the organization to make employees perceive organizational support and commit to their organization. According to empirical findings, the practices of high-commitment HRM can affect employee motivation (Whitener, 2001), and a positive relationship exists between supportive HRM and POS (Allen *et al.*, 2003). Thus, Hypothesis 1 is proposed:

- H1.* High-commitment HRM and perceived organizational support are positively correlated.

*Relationships among POS, organizational trust, and organizational commitment*

Kim and Mauborgne (1998) argued that employee trust toward management can be reflected in their trust of an organization and its leaders, and then agree that organizational actions can benefit them. Additionally, scholars have proposed that development of employee trust through social exchange processes can explain organizational actions and generate reciprocation. In other words, employees who trust managements are supportive members toward organizational actions, thus responding to their perception (Whitener, 2001).

As argued by Aryee *et al.* (2002), there are two types of trust, including cognition-based trust and affect-based trust. Cognition-based trust reflects individuals' beliefs of reliability, dependability and competency in order to evaluate their ability to carry out obligations. Affect-based trust reflects individuals' emotional attachments which are from mutual care among organizational members. When employees perceive organizational support and organizational care, employees will exhibit emotional attachments and affective commitment toward an organization (Allen *et al.*, 2003). From the perspectives of social exchange theory, POS can create organizational trust and make an organization fulfill its exchange obligations by informing and rewarding employees (Eisenberger *et al.*, 1990). Moreover, POS can also cause employees to have long-term trust toward an organization to reciprocate additional employee performance created by employees (Eisenberger *et al.*, 1990). Based on social identity theory, when the possibility to distinguish between employees and the organization is decreased, employee perceptions are based on social identity (Tanis and Postmes, 2005). That is, employees who perceive organizational support feel that they are organizational members and identify with the organization, thus producing interpersonal trust in the organization. Whitener (2001) determined employee POS is



significantly and positively associated with employee trust. Thus, Hypothesis 2 is proposed:

*H2. Perceived organizational support and organizational trust are positively correlated.*

Organizational commitment is an attitude suggesting that employees identify with organizational goals and are willing to devote themselves to an organization (Mowday *et al.*, 1979). Organizational commitment, especially affective commitment, is the focus of most studies, and employees typically generate this commitment based on organizational attraction and a sense of belonging (Meyer and Allen, 1991). Organizational commitment based on this affection emphasizes employee feelings of organizations and sharing value; otherwise, organizational commitment based on calculations underscores the importance of employee attendance, job performance, and turnover (Eisenberger *et al.*, 1990).

From the perspectives of reciprocal norms, employees helped by others are inclined to feel obligated to help others. When employees have a high degree of POS, they will feel important to an organization and be willing to participate in decision-making in order to reciprocate an organization. Thus, employees who have a high degree of POS are more willing to remain with an organization (Allen *et al.*, 2003) and perform their jobs well (Eisenberger *et al.*, 1990).

Allen *et al.* (2003) determined that employees who perceive organizational support and organizational care will have a better rate of attendance, job performance, organizational citizenship behavior, job satisfaction, and affective commitment to an organization. Additionally, employees who are treated fairly will reciprocate with high job performance and positive attitudes, including organizational trust. Employees who perceive organizational support will generate affective attachments belonging toward the organization and be willing to be members of that organization (Meyer and Allen, 1991). From empirical evidence, Fuller *et al.* (2003) found that POS is positively related to organizational commitment via utilizing perspectives of social identity theory. Thus, Hypothesis 3 is proposed:

*H3. Perceived organizational support and organizational commitment are positively correlated.*

*Relationships among organizational trust, organizational commitment, and knowledge-sharing behavior*

Employees who are treated fairly and have high-quality relationships with the organization will have a high degree of trust. Trusting in the organization makes employees willing to stay in the organization, and devote themselves to the organization that fairly rewards them. That is, employees with a high level of trust may increase their commitment that they are responsible for tasks assigned by an organization (Tremblay *et al.*, 2010). Conversely, employees without trust or reciprocal relationship with the organization will have less commitment.

Flynn (2005) asserted that employees with relational identity orientation could perform reciprocal exchange toward the organization. As argued by Tremblay *et al.* (2010), relational trust strengthens the nature of reciprocity and fosters employee emotional bond, thus contributing to employees' organizational commitment.

Employees who have trust in an organization have a relational identity to generate organizational commitment. Thus, we propose the following hypothesis:

- H4.* Organizational trust and organizational commitment are positively correlated.

Knowledge-sharing behavior contributes to the creation and utilization of knowledge, which is regarded as the most important resource in an organization (Grant, 1997). However, knowledge sharing cannot be promoted without employee motivation and willingness, which are enhanced by trust. Employees who trust their knowledge-sharing behavior will be fairly rewarded and will be willing to share their tacit knowledge. Tremblay *et al.* (2010) asserted that trust is regarded as the lubrication that makes an organization act as an integrated mechanism that enhances the organizational efficiency.

Employees who trust in the organization and colleagues produce extra-role behavior (Tremblay *et al.*, 2010), contributing to knowledge sharing. Flynn (2005) argued that employees with collective identity orientation have a generalized exchange relationship, which makes employees perform extra-role behavior. Whitener (2001) utilized perspectives of social exchange theory to account for employee trust in an organization and the generation of reciprocal behavior. Based on prior research (Tyler, 2003; Gould-Williams, 2007), trust is significantly related to extra-role behavior. Andrews and Delahaye (2000) have demonstrated that organizational trust can predict employee knowledge-sharing behavior and attitude. Thus, Hypothesis 5 is proposed:

- H5.* Organizational trust and knowledge-sharing behavior are positively correlated.

Employees, who have an affective commitment toward the organization (Allen *et al.*, 2003), have high loyalty and job performance (Eisenberger *et al.*, 1990). This reveals that employees with organizational commitment perform well, not just in in-role behavior, but also in extra-role behavior, so as to benefit the organization. Scholars have found that a positive relationship exists between organizational commitment and organizational citizenship behavior (Podsakoff *et al.*, 2000). In fact, a sense of belonging (e.g. psychological ownership) affects altruistic spirit through organizational commitment and then affects knowledge-sharing behavior. Hislop (2003) demonstrated that organizational commitment could predict employee knowledge-sharing attitude and behavior. Taking the social exchange perspectives, Flynn (2005) asserted that employees with collective identity orientation exhibit generalized exchange relationships, which contribute to extra-role behavior. This reveals that employees with organizational commitment perform generalized exchange relationships, fostering knowledge-sharing behavior. Based on social identity, employees whose perceptions are based on social identity identify with the organization (Tanis and Postmes, 2005), thus producing positive cognition (e.g. organization commitment) and behavior (e.g. knowledge-sharing behavior). Thus, Hypothesis 6 is proposed:

- H6.* Organizational commitment and knowledge-sharing behavior are positively correlated.



*The mediating roles*

According to the literature, perceived organizational support, organizational trust, and organizational commitment play important roles in the mediating effect. Whitener (2001) found that high commitment HRM moderates the relationships among perceived organizational support, employee commitment, and trust-in-management. Trust-in-management played a partial mediator in the relationship between perceived organizational support and organizational commitment; however, they didn't further discuss the consequences, such as job satisfaction, intention to leave, organizational performance, and knowledge-sharing behavior. For example, Loi *et al.* (2006) found that procedural and distributive justices positively affect POS, and POS mediates the positive effect on organizational commitment and intention to leave. Aryee *et al.* (2002) found that trust plays a partial mediator and full mediator among relationships of distributive justice, procedural justice, work attitudes of job satisfaction, turnover intentions, and organizational commitment. Suliman (2002) found that two factors of organizational commitment (normative commitment and continuance commitment) play different mediating roles in the relationship between perceived work climate and performance. Based on the literature discussed above, there are still few researches that discuss the relationship between HRM and knowledge sharing-behavior; therefore, this study argues that it is necessary for researchers to explore the relationship between high-commitment HRM and knowledge-sharing behavior by examining its mediators.

Based on prior research, Whitener (2001) determined that high-commitment HRM contributes to perceived organizational support and organizational commitment via utilizing social exchange theory; perceived organizational support contributes to organizational commitment (Meyer and Allen, 1991) and organizational commitment contributes to knowledge-sharing behavior (Hislop, 2003). Taking the social identity perspectives, employees who feel they are appreciated by an organization perceive high organizational status (Fuller *et al.*, 2003), thus producing positive cognition and behavior. Therefore, the relationship between high-commitment HRM and knowledge-sharing behavior may be mediated by perceived organizational support and organizational commitment, and thus Hypothesis 7 is proposed. Based on social identity theory, organizational practices (e.g. high-commitment HRM) which decrease the possibility to distinguish between individuals and the organization make employee perceptions likely to be based on social identity. Then, expectations of reciprocity, which are enhanced by interpersonal trustworthiness contribute to trusting behavior (Tanis and Postmes, 2005). Whitener (2001) found that perceived organizational support contributes to organizational trust through social exchange perspectives, and organizational trust contributes to knowledge-sharing behavior (Andrews and Delahaye, 2000). Therefore, the relationship between high-commitment HRM and knowledge-sharing behavior may be mediated by perceived organizational support and organizational trust, and thus Hypothesis 8 is proposed:

- H7. High-commitment HRM is positively related to knowledge-sharing behavior mediated by perceived organizational support and organizational commitment.
- H8. High-commitment HRM is positively related to knowledge-sharing behavior mediated by perceived organizational support and organizational trust.

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## Method

### *Sample and procedures*

The data in the study was obtained from a survey of practitioners registered in the executive MBA programs of a university in northern Taiwan. In fact, these participators from executive MBA programs are practitioners who have the privilege to participate in decision making of HRM practices and deeply understand HRM practices of organizations. A name list of participators was obtained from the administrative department. In total, 303 questionnaires were mailed to these respondents in 2006, and 198 completed questionnaires were returned, representing a response rate of 66 percent. Among the respondents, 112 were male (56.6 percent) and 86 were female; 58.4 percent of respondents were married. Most respondents were middle-aged and college graduates. As for the age, 45.5 percent were 36-45 years old, 38.4 percent were 26-35 years old, 14.1 percent were 46-55 years old, and 2.0 percent were under 25 years old. Most of the respondents (74.2 percent) had college or university degrees. The average tenure of the respondents was 7.9 years (standard deviation was  $\pm 7.4$  years). As to the occupational status of the respondents, 19.5 percent were non-managers, 19.0 percent were first-line managers, 28.1 percent were middle managers, and 23.8 percent were senior executives. Based on the above-mentioned information, most of the respondents were not top managers.

### *Measure*

*High-commitment HRM.* A nine-item high-commitment HRM scale was adapted from Snell and Dean (1992) and utilized to measure employee perceptions of the extent of high-commitment HRM practices, including practices related to selective staffing, comprehensive training and development, developmental appraisal, as well as competitive and equitable compensation. The sample items are as follows: "Our company uses a variety of selection tools (e.g. interviews, tests, work samples) in talent selection", "Our company provides a variety of training opportunities", "Our company pays employees according to their contributions and performance", and, "The pay level of our company is competitively relative to its market competitors." All responses to items were measured on a five-point Likert scale, ranging from 1 = "extremely disagree" to 5 = "extremely agree". The alpha coefficient was 0.71.

*Knowledge-sharing behavior (K-S behavior).* Knowledge-sharing behavior refers to the frequency employees disseminate and share job-related know how with their co-workers. Based on existing KM research and scales (Zarraga and Bonache, 2003), this study developed a four-item scale to measure employee knowledge-sharing behavior. Sample items are as follows: "I share my work experiences and knowledge with my co-workers", "I show my co-workers how to perform the most difficult part of the work", and, "I answer questions posed by my co-workers." All responses to items were measured on a five-point Likert scale, ranging from 1 = "seldom" to 5 = "always". The alpha coefficient was 0.70.

*Perceived organizational support (POS).* POS helps employees commit to an organization. A five-item scale adapted from Eisenberger *et al.* (2001) was applied to capture employee POS. Items are as follows: "My company pays attention to employee goals and personal values", "My company cares about employee personal welfare", "My company always gives me a hand whenever I need help", "I am proud of my job

achievements”, and “My company pays attention to my contribution toward organizational performance.” All responses to items were measured on a five-point Likert scale, ranging from 1 = “extremely disagree” to 5 = “extremely agree”. The alpha coefficient was 0.85.

*Organizational trust (OT).* Organizational trust refers to employee trust that is reflected in their trust of an organization and its leaders; and employees typically believe organizational practices will benefit them. A five-item scale was adapted from Robinson and Rousseau (1994) to capture employee organizational trust. The items are as follows: “My supervisor is a person with integrity”, “The way that my supervisor treats people is unanimous before and after people”, “Generally, I believe my supervisors’ motivations and intentions are good”, “I think my supervisors treat me unfairly”, and, “I am honest with my supervisor.” All responses to items were measured on a five-point Likert scale, ranging from 1 = “extremely disagree” to 5 = “extremely agree”. The alpha coefficient was 0.84.

*Organizational commitment (OC).* Organizational commitment is an employee’s affective commitment towards an organization. A six-item scale was adapted from Meyer *et al.* (1993) to capture employee affective commitment. Sample items are as follows: “I am willing to work for my company for my whole life”, “I have a strong sense of belonging to my company”, and “I think I am an insider at my company”. All responses to items were measured on a five-point Likert scale, ranging from 1 = “extremely disagree” to 5 = “extremely agree”. The alpha coefficient was 0.83.

#### *Structural equation modeling (SEM)*

The present model was examined via LISREL 8.30. This research adopted a two-step approach of structural equation modeling (SEM), first evaluating the measurement model to test the validity of indicators, and then evaluating the structural model. In order to correctly evaluate the structural model, two multivariate techniques, which include factor analysis and multiple regression analysis, make SEM as a combination of interdependence and dependence techniques that can explain relationships among multiple variables. The research model proposed by this research includes multiple variables; therefore, it is suitable for this research to correctly evaluate the structural model via utilizing the SEM approach.

#### *Common method variance (CMV)*

Since the data of high-commitment HRM, POS, OT, OC, and knowledge-sharing behavior was collected in the same period, there might be common method variance (CMV). In order to attenuate the CMV, procedural and statistical remedies suggested by Podsakoff *et al.* (2003) were utilized by this research. In the procedural remedy, this study allowed the participants to be anonymous and assured that they can answer the questions as honestly as possible. In the statistical remedy, this research utilized two methods to attenuate the bias of common method variance. First, all items were concluded to one general factor, and the analytical results for fitness included:  $\chi^2/\text{d.f.} = 3.28$  (d.f. = 377); CFI = 0.9; GFI = 0.68; NNFI = 0.89; RMSEA = 0.123, suggesting that the fitness of the one-factor model was poor. Second, all items were measured in accordance with the proposed model; the analytical results for fitness included:  $\chi^2/\text{d.f.} = 2.23$  (d.f. = 367), CFI = 0.95, GFI = 0.8, NNFI = 0.95, and RMSEA = 0.07, indicating that the fitness of the five-factor model is sufficient.

Second, this research allowed all indicators of five constructs to load on a latent construct (i.e. method constructs) as well as all the research constructs (i.e. trait constructs). The fitness indices of the proposed model with a CMV model included:  $\chi^2/\text{d.f.} = 1.33$  (d.f. = 388), CFI = 0.98, GFI = 0.85, NNFI = 0.97, and RMSEA = 0.06. Although the fitness of the CMV model is somewhat better than those of the proposed model, *t*-values of some method loadings were not significant in the CMV model. However, *t*-values of trait loadings are all significant in the proposed model. According to the above-mentioned procedural and statistical remedies, this research thinks the bias of common method variance is solved.

## Result

### Correlations

Table I presents the correlations for all constructs. Notably, high-commitment HRM and POS, POS and organizational trust, POS and organizational trust, and organizational commitment and knowledge-sharing behavior are strongly correlated. However, organizational trust and knowledge-sharing behavior were not significantly correlated. Cronbach's  $\alpha$  for each construct were 0.71, 0.85, 0.84, 0.83, and 0.70, respectively, showing that the model had good stability.

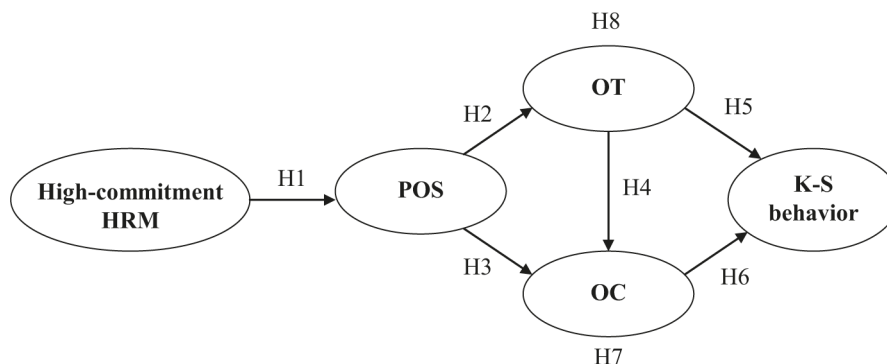
### Structural model

Figure 1 illustrated the hypothesized model tested in the present study. The structural model fit well,  $\chi^2/\text{d.f.} = 2.21$  (d.f. = 371), CFI = 0.952, GFI = 0.8, NNFI = 0.95, RMSEA = 0.07, indicating that the fitness of this structure model is sufficient (see Figure 2).

	M	S.D	1	2	3	4	5
1. High-commitment HRM	3.00	0.67	(0.71)				
2. POS	3.21	0.70	0.64*	(0.85)			
3. OT	3.46	0.76	0.50*	0.63*	(0.89)		
4. OC	3.44	0.73	0.62*	0.72*	0.52*	(0.84)	
5. K-S behavior	4.10	0.49	0.31*	0.35*	0.14	0.36*	(0.70)

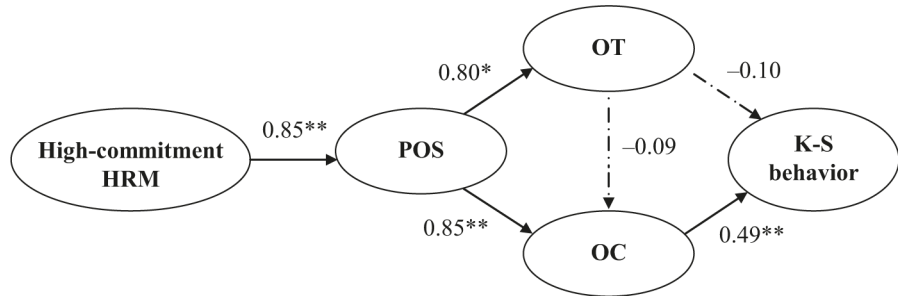
**Note:** ( ):Cronbach's  $\alpha$ ; \* $p < 0.01$

**Table I.**  
Correlations, means,  
and SD



**Figure 1.**  
Research framework

**Figure 2.**  
Structural model



**Note:** \* $p < 0.05$ ; \*\* $p < 0.01$

In addition, to the positive fit criteria, the standardized path coefficient from HRM to POS is 0.85 ( $p < 0.01$ ), thus *H1* is supported. The standardized path coefficient from POS to organizational trust is 0.80 ( $p < 0.05$ ), thus *H2* is supported. The standardized path coefficient from POS to organizational commitment is 0.85 ( $p < 0.01$ ), thus *H3* is supported as well. However, the standardized path coefficient from organizational trust to organizational commitment is  $-0.09$  ( $p > 0.1$ ), thus *H4* is not supported. The standardized path coefficient from organizational trust to knowledge-sharing behavior is  $-0.10$  ( $p > 0.1$ ), thus *H5* is not supported either. Last, the standardized path coefficient from organizational commitment to knowledge-sharing behavior is 0.49 ( $p < 0.01$ ), thus *H6* is supported.

Our conceptual model tried to find out the mediating mechanism from high-commitment HRM to knowledge-sharing behavior. The analytical results show that high-commitment HRM affects organizational trust and organizational commitment through POS. Next, POS affects knowledge-sharing behavior through organizational commitment; therefore, *H7* is supported. However, POS does not significantly affect knowledge-sharing behavior through organizational trust, indicating that *H8* is not supported. To sum up, our analytical results represent that high-commitment HRM affects knowledge-sharing behavior through the psychological mechanism of POS, and then, through organizational commitment, but not through organizational trust.

### Discussion

Prior research on high-commitment HRM focused primarily on its relationship with firm performance. However, there is a call for more research efforts to uncover the processes mediating the relationship between high-commitment HRM and firm performance (Becker and Gerhart, 1996; Bowen and Ostroff, 2004). In a recent study of high-technology firms, Collins and Smith (2006) demonstrated that high-commitment HRM practices affect firm performance measured by revenue from new products and services and sales growth through social climate (i.e. trust and cooperation), as well as knowledge exchange and combination. This study principally discussed the relationship between high-commitment HRM and knowledge-sharing behavior, and its mediators.

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*Hypotheses examination*

Based on analytical results, *H1*, *H2*, *H3*, *H6*, and *H7* are supported. First, high-commitment HRM is positively associated with POS, revealing that practices of high-commitment make employees perceive that the organization supports them. The result is consistent with the argument of Whitener (2001), social exchange theory and social identity theory, indicating that employees who feel they are appreciated by their organization may perceive high status in the organization and may reciprocate an organization (Flynn, 2005; Fuller *et al.*, 2003). Second, perceived organizational support is positively related to organizational commitment and organizational trust, representing employees who perceive organizational support may produce organizational commitment and organizational trust. The results are consistent with Meyer and Allen (1991) who asserted that employees with POS may generate affective attachments toward the organization, and Eisenberger *et al.* (1990) who argued that POS can make employees have long-term trust toward an organization. The findings are also consistent with social exchange theory (Eisenberger *et al.*, 1990) and social identity theory (Fuller *et al.*, 2003). Third, the result represents that organizational commitment contributes to knowledge-sharing behavior, which is regarded as an important behavior in the era of knowledge economy. The finding is consistent with scholars (Podsakoff *et al.*, 2000), social identity theory and social exchange theory (Flynn, 2005). Fourth, a positive relationship, which exists between high-commitment HRM and knowledge-sharing behavior, is mediated by perceived organizational support and organizational commitment. The result is consistent with perspectives of scholars (Whitener, 2001; Meyer and Allen, 1991), social exchange theory, and social identity theory (Fuller *et al.*, 2003).

*Implications*

This study sheds some light on how to foster knowledge-sharing behavior via organizational practices and positive employee cognitions. High-commitment can be adopted by an organization to make employees feel that the organization appreciates them and then perceive organizational support. When employees perceive organizational support, they will generate attachment toward an organization (i.e. organizational commitment) and then perform responsible behavior, benefiting the organization. Employees who feel they are valuable via practices of high-commitment HRM, perceive organizational support which contributes to organizational trust. Knowledge-sharing behavior is fostered by organizational commitment, which is enhanced by perceived organizational support.

As for the mediating effects, the importance of mediating roles of perceived organizational support and organizational commitment are proved. It reveals that an organization can adopt high-commitment HRM to make employees produce knowledge-sharing behavior, which is mediated by perceived organizational support and organizational commitment. That is, an organization can adopt high-commitment HRM to make employees produce perceived organizational support and organizational commitment which contribute to knowledge-sharing behavior, benefiting the organization. However, the mediating role of organizational trust isn't verified, representing that organizations should improve the relationship between the organization and employees to enhance employee trust toward the organization. The



practice of employee participation decision making can be adopted to improve the situation. For example, an organization can let employees participate in decision making and then make employees trust in the strategy or practice which is produced through a cooperative process.

In the era of knowledge economy, knowledge-sharing behavior which is fostered via organizational practices and positive employee cognitions can make an organization clearly understand the demands of markets and bring good services and products to markets, thus enhancing organizational performance. In conclusion, an organization should adopt high-commitment HRM that can make employees perceive organizational support and organizational commitment, thus fostering knowledge-sharing behavior.

#### *Contributions*

Several important contributions of this research should be noted. First, the relationship between high-commitment HRM and knowledge-sharing behavior and its mediators are investigated by this research to fulfill the research gap. Second, this study demonstrated how perspectives of social exchange and social identity dominate perceptions of high-commitment HRM practices and knowledge-sharing behavior, thus expanding social exchange theory and social identity theory. Third, existing studies ignored mediating roles between high-commitment HRM practices and knowledge-sharing behavior. This study demonstrated that the relationship between high-commitment HRM and knowledge-sharing behavior is mediated by perceived organizational support and organizational commitment. Fourth, the result demonstrated that employee mental process plays an important role in the process of knowledge sharing. Fifth, high-commitment HRM can be adopted by an organization to make employees produce positive cognition (e.g. perceived organizational support) and behavior (e.g. knowledge-sharing behavior).

#### **Limitation and future studies**

Several limitations of this study should be considered. First, since the data used in analyses were collected in the same period; common method variance may be a concern, leading to inflation of estimated strength of the relationship between high-commitment HRM and knowledge-sharing behavior among these variables. Future research can collect data from different sources. For example, researchers can collect data concerning organizational commitment, organizational trust, and knowledge-sharing behavior from superiors and co-workers after the wave of a survey to solicit their perceptions of high-commitment HRM and POS. Second, Schwab (2005) argues that it is better for researchers to use longitudinal data to reduce the CMV bias. Thus, longitudinal data can be utilized in the future study.

Third, the content of high-commitment HRM practices adopted by this study is a general representation of high-commitment HRM practices, not a comprehensive representation. Future studies can investigate a relatively broader system of high-commitment HRM practices and the extent of these practices, including employee participation, team-building and leadership (Collins and Smith, 2006). Fourth, the sample of this study was not collected randomly; sampling bias might be a research concern in this study. Therefore, future research may collect randomized

data from organizations to reduce this potential bias. Fifth, the sample of this study is only from Taiwan, and future study may collect data from different countries in order to explore cultural differences that affect these relationships proposed by this research.

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