

Person-organization and person-supervisor fits: Employee commitments in a Chinese context

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Abstract:

The present study simultaneously examined people's perceptions of person–organization (PO) and person–supervisor (PS) fit and related these perceptions to employees' commitments. Three-hundred-and-sixty employee–supervisor dyads from Taiwanese organizations reported about their PO fit and PS fit perceptions. In addition, supervisors reported about their perceptions of fit and guanxi with each of their employees. Results indicated that PO and PS fit perceptions both had an independent and additive relationship with organizational commitment. The link between employee PS fit perceptions and organizational commitment was mediated by commitment to the supervisor. Both employee and supervisor fit perceptions contributed to commitment to the supervisor through their influence on the quality of the leader-member exchange (LMX). Guanxi could not explain additional variance in LMX and supervisor commitment. Implications for theory and practices regarding person–environment fit, commitment, and LMX are discussed. The study findings offered suggestions for a new Theory of Multiple Fits.

Keywords: person–organization fit | person–supervisor fit | organizational commitment | commitment to the supervisor | guanxi

Article:

Introduction

Employees have a strong need to fit their work environment (e.g., Schneider, 2001). They seek jobs that fit, they cherish organizations that fit, and they tend to leave work environments that do not fit. The concept of fit concerns the extent to which persons perceive that their characteristics

(personalities and values) are similar to those of their environment (e.g., Kristof-Brown, Zimmerman, & Johnson, 2005; Schneider, 2001), also referred to as supplementary fit. This concept, however, is a complex one since the person and the environment involve many aspects on which supplementary fit may exist. For example, employees may perceive fit with their job (person-job fit) and with their supervisor (person-supervisor fit) while at the same time they may experience a misfit with their coworkers (person-group fit) and the culture of the organization (person-organization fit). Previous studies have examined these different types of fits, but only few studies have tested whether they are truly distinct, and if so, how they affect individual outcomes.

Surprisingly, to our knowledge there is no research that simultaneously examined people's perceptions of person-organization (PO) fit and person-supervisor (PS) fit (Kristof-Brown et al., 2005). PO fit perceptions concern the perceived match between employees' and organization's values, whereas PS fit perceptions concern the perceived match between employees' and supervisors' characteristics (values, personality, and behavioral styles). An organization's culture values and supervisors' characteristics are both highly significant for employees. This begs for the question whether employees' PO and PS fit perceptions are distinguishable, and if so, how they combine in predicting employees' affective reactions. Examining the distinctiveness of PO fit and PS fit perceptions is important in order to exclude the possibility that previous research has evidenced their unique contributions whereas they are actually strongly connected. In addition, precisely how employees combine their PO fit and PS fit perceptions as influencing their affective responses is important to examine as well. One type of fit may strengthen or weaken the effect of another type of fit or, instead, one type of fit may supplement another one. More theoretical and practical knowledge about the precise form of PO and PS fit relationships is needed. There is hardly any theory that describes how multiple fits intermingle. Also, little is known about the options that organizations have to manage their outcomes as related to employees' fit perceptions.

Employees may view their supervisor as a salient representative of the norms and values that constitute the organization's culture. They may, therefore, experience fit with their supervisor as similar to fit with their organization. Alternatively, supervisors and organizations may function as relatively independent sources of comparison to assess a person's fit. This notion is supported by studies that independently investigated PO and PS effects and found that these fit measures were differently related to organizational outcomes (Jansen & Kristof-Brown, 2006; Kristof-Brown et al., 2005). We, therefore, propose in this study that employees distinguish between their PO and PS fits. We test this proposition in a Chinese cultural context that emphasizes a large power distance and vertical sources of guidance (formal rules and superiors) and, thus, a strong alignment between organizational leaders and values (e.g., Aycan, 2008). Hence, this study can be conceived of as a conservative test of the distinction between PO and PS fit perceptions.

In this study, we test a comprehensive model (see Figure 1) that describes the links between PO and PS fit perceptions and employees' organizational commitment. We focus on organizational commitment as the outcome variable, because employee attachment to the organization is central to many individual as well as organizational outcomes (Meyer & Allen, 1997). Precisely how PO fit and PS fit perceptions contribute to employees' commitment to the organization is yet unclear

because extant multidimensional fit studies did not include PS fit perceptions. Based on theory and research that explain the links between fit perceptions and outcomes, we first propose that employees' PO fit and PS fit perceptions will both independently relate to organizational commitment. In addition, we argue that the relationship between PS fit perceptions and organizational commitment is mediated by employees' commitment to the supervisor. Moreover, besides a direct link between employee PS fit perceptions and commitment to the supervisor, we also expect an indirect relationship through employee perceptions of the quality of leader-member exchange (LMX).

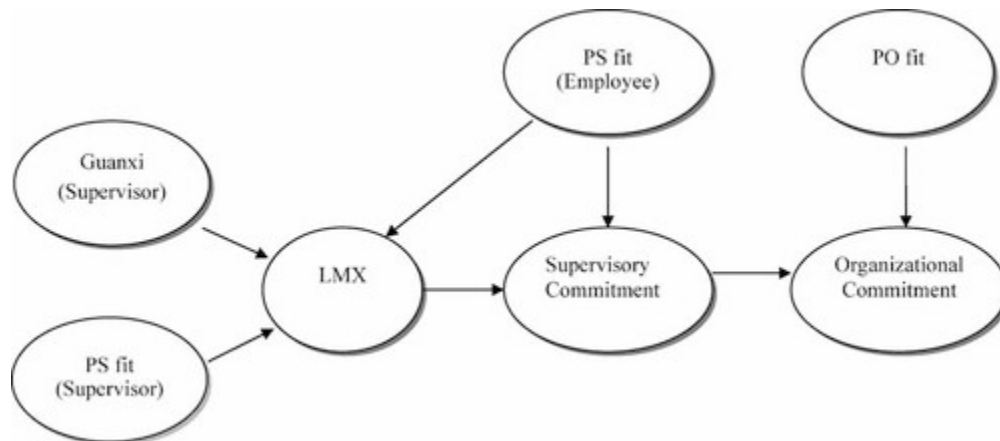


Figure 1. Proposed research framework

Not only employee PS fit perceptions but those of their supervisor (supervisor's fit with an employee) may affect employee perceptions and outcomes as well (Liden, Wayne, & Stilwell, 1993). In this study, we examine whether supervisor PS fit perceptions are related to employee perceptions of LMX and commitment to the supervisor. Moreover, we examine the role of supervisor–employee interpersonal ties, or guanxi, that are typical for the Chinese society since these ties may also affect employees' LMX and commitment to the supervisor.

Taken together, with this study we extend multidimensional fit research by focusing on the combination of two significant fit perceptions (PO and PS) that both refer to employees' work environment yet are expected to be different. We investigate the strength and form of their relationships with an outcome variable (organizational commitment) that is highly significant for organizations as well as individuals. Moreover, we integrate several research domains by developing a comprehensive model that links different PS fits to employees' supervisory and organizational commitments by means of LMX. We test this model while taking the Chinese context into account.

Fit With the Work Context: PO and PS Fit

A considerable amount of research has evidenced that fit at work matters to people. Employees who perceive fit with their work environment are better off than those who do not perceive fit. Individuals who fit are more satisfied with their job (Bretz & Judge, 1994; Cooper-Thomas, Van Vianen, & Anderson, 2004; Jansen & Kristof-Brown, 2006), are more attached to their organization (Cable & Judge, 1996; Westerman & Cyr, 2004), and tend to perform better (Downey, Hellriegel, & Slocum, 1975; Lauver & Kristof-Brown, 2001). Fit at work is broadly

defined as the compatibility between a person and his or her work environment that occurs when their characteristics are well matched (Kristof-Brown et al., 2005). However, the work environment is comprised of different entities with which individuals may fit, such as the overall culture of the organization and the characteristics of the supervisor.

PO fit perceptions concern the match that individuals perceive between their own values and those of the organization. PO fit perceptions are vital for job applicants' organizational choice (e.g., Saks & Ashforth, 1997), for recruiters' hiring decisions (e.g., Kristof-Brown, 2000), and for employees' commitment to the organization and, thus, their turnover decisions (Cable & DeRue, 2002; Kristof-Brown et al., 2005). These findings suggest that people are able to compare individual values with those of the broader work context in order to establish their PO fit. However, little is known about how PO fit perceptions arise and how people form their impressions about an organization's values and culture. For example, they may derive their culture impressions from general organizational practices or the idiosyncratic experiences with the nearby work context as constituted by their supervisor and coworkers. Supervisors in particular are able to shape employees' environmental experiences through their supervisory values and actions (Schein, 2004).

PS fit perceptions refer to the perceived fit between employee and supervisor characteristics. Supervisor characteristics are important to employees. It has been shown that if employees feel that their values match with those of the supervisor they are satisfied with the job and general work environment (Wexley, Alexander, Greenawalt, & Couch, 1980). However, the number of studies that examined people's PS fit perceptions has been relatively limited as compared to the number of studies that examined PO fit perceptions. Moreover, to our knowledge there are no studies that examined employees' PS fit and PO fit perceptions simultaneously. Kristof-Brown et al. (2005) noted that: "There has been surprisingly little research focused on validating multidimensional approaches" (p. 320) and that PS fit in particular was not incorporated in these sparse multidimensional fit studies.

Multidimensional studies of fit perceptions combined measures of PO fit with those of person-job (PJ) fit, such as needs-supplies fit (the perceived fit between employees' needs and the rewards they receive) and demands-abilities fit (the perceived fit between employees' skills and the demands of the job) (Cable & DeRue, 2002). These studies showed that employees are able to distinguish the culture of their organization (O) from the content of their job (J). Yet, the combination of PO fit and PS fit perceptions is particularly intriguing to study since organizational cultures and leaders seem fairly tied to each other. Schneider et al.'s (Schneider, Goldstein, & Smith, 1995) Attraction-Selection-Attrition framework proposes that organizational cultures are created through the shared characteristics of organizational citizens. Over time organizations tend to become homogeneous in terms of personalities and values due to the mechanism that people select themselves into or out of the organization. Managers in particular tend to share their characteristics, since they are promoted to higher organizational levels due to their excellent match with the organization's culture (Giberson, Resick, & Dickson, 2005; Schneider, Smith, Taylor, & Fleenor, 1998). In addition, their managerial behaviors are expected to represent an organization's culture.

Although cultures and their leaders may share some of their characteristics, this does not imply that they are the same and that PO fit is akin to PS fit. From a cognitive theoretical perspective, PO and PS fit are quite distinct with regard to their content (cultural values vs. individual characteristics) and level (organizational vs. individual). For example, organizational culture and underlying value systems also depend on the organization's strategic position and business environment since these factors impose constraints on structure and control systems in the organization (Joyce & Slocum, 1990). Hence, employees' organization-focused fit perceptions originate in characteristics that are different from supervisor-related ones. We, therefore, expect that employees will distinguish between their fit with the organization and their fit with the supervisor.

Further insight into the contribution of PO and PS fit perceptions to specific outcomes, such as their strength and form, is highly important for fit theory and practice. Research is needed that disentangles PO and PS fits' explanatory power. If PO fit and PS fit perceptions are indeed cognitively independent, the findings of earlier research that examined their unique contribution to individual and organizational outcomes is supported. However, if PO fit and PS fit perceptions appear to converge earlier studies have overestimated their unique contribution. In the present study we examine PO fit and PS fit perceptions as related to employee organizational commitment because organizational commitment can be conceived of as a core variable for performance, prosocial behaviors, absenteeism, and turnover (Meyer & Allen, 1997). Below, we will further elaborate on the strength and form of the relationships between PO fit perceptions, PS fit perceptions, and organizational commitment.

Employees' Fit Perceptions and Organizational Commitment

PO fit perceptions concern the broader work context, whereas PS fit perceptions concern the most salient person in one's direct work environment. Hence, PO and PS fit are conceptually different and they are also treated as such in extant fit research. A meta-analysis of Kristof-Brown et al. (2005) showed substantial correlations between PO fit perceptions and organizational commitment, whereas more modest correlations were found with PS fit. These latter findings are, however, mostly based on indirect measures of PS fit whereby personal and supervisor characteristics were separately measured and combined into a fit index. However, the results suggest that employees' PS fit perceptions and organizational commitment may be positively related as well. To date, little is known about the extent to which PS fit perceptions add to the explanatory power of PO fit perceptions and/or influence their relationship with organizational commitment.

Some sparse studies have examined multiple fit dimensions. These studies showed both main and interactive relationships with work attitudes (Kristof-Brown, Jansen, & Colbert, 2002; Resick, Baltes, & Walker-Shantz, 2007). Kristof-Brown et al. (2002) used a policy capturing study to examine the combined effects of PO, PJ, and person-group (PG) fit perceptions on work satisfaction. Besides main effects, they found an interaction effect of PO and PJ fit and a three-way interaction effect of PO, PJ, and PG fit. However, the external validity of this study was limited, because participants were provided with scenarios with fit cues and the study was not performed in a natural work environment. Resick and colleagues (2007) collected PO fit perceptions and PJ fit perceptions (as separated into needs-supplies fit and demands-abilities fit)

from individuals in a 12-week internship and related these measures to satisfaction with the internship, employment intentions, and job offer decisions. Besides strong PO and PJ fit main effects, they found some evidence that needs-supplies fit moderated the relationship between PO fit and satisfaction, while demands-abilities fit moderated the relationship between PO fit and employment intentions and job offer decisions. Finally, a recent study from Vogel and Feldman (2009) examined the interplay of person-vocation (PV), PG, PO, and PJ fit for employees' work attitudes and performance. They found interaction effects of PG and PJ fit, but no interaction effects of PG and PO fit. All in all, these earlier findings suggest interaction effects with PJ fit in particular, but the results are equivocal with respect to other fit dimensions. This may mean that the main and interaction effects of fit perceptions that were found in a particular study were dependent on the specific combination of fit measures and outcomes involved.

Jansen and Kristof-Brown (2006) have argued that people who experience a good fit on one facet and poor fit on another downplay the lack of fit to reduce cognitive dissonance from conflicting perceptions of fit. They suggested interactive rather than additive effects of different fits. This suggestion should be further explored because the precise form of fit effects is important for organizations. An interaction effect would imply, for example, that organizations could alleviate the negative impact of employee perceived misfit with the supervisor by policies and programs that support employee PO fit. In contrast, focusing on only PO fit would be insufficient to create high levels of commitment among employees if additive effects are true. The perceived match with one's supervisor then functions as the baseline for one's level of attachment towards the organization. Interaction or additive effects are important for individuals as well. For example, when job applicants expect a lower fit with the culture of the organization they could pay closer attention to their fit with the prospective supervisor in case PO and PS fit interact. However, if additive effects are true, they rather should weight both their fits with the organization and the supervisor.

The distinctive contribution of PO and PS fit perceptions

Jansen and Kristof-Brown (2006) have suggested that people rely on the dominant fit cue when forming work-related attitudes. PO fit is the dominant fit cue in the present study because PO fit was found to be most strongly related to organizational commitment (Kristof-Brown et al., 2005). The first research question then is whether PO fit and PS fit will each explain unique variance in organizational commitment. Above, we have argued that employees will distinguish between their PO and PS fit perceptions. That is, employees' PS fit perceptions may add to organizational commitment irrespective of their level of organizational fit. Supervisors are the key factors for putting an organization's culture into practice. If employees perceive a fit with the overall culture, they are yet dependent on their supervisor of how cultural values are transmitted to their daily work environment. An organization's culture represents the more distal work environment whereas supervisors' behaviors represent employees' proximal work context. If employees perceive that their values are aligned with those of the organization, this fosters perceptions of organizational integrity and the belief that they will not be harmed (Edwards & Cable, 2009). Supervisors are, however, able to further strengthen or weaken these positive perceptions.

The Chinese society in particular emphasizes the formal power of leaders and the value of the leader-member relationship (e.g., Chen, Tsui, & Farh, 2002; Redding, 1990). The supervisor–employee relationship in a Chinese culture is a paternalistic one with supervisors having high authority over their employees and employees being loyal to their supervisor (Farh & Cheng, 2000). Supervisors in the Chinese culture not only have high legitimate power over their employees but they also have personalized relationships with them, which means that personnel decisions depend on the personal bonds that supervisors have with their employees (Farh, Earley, & Lin, 1997). Chinese employees' organizational life's are, therefore, particularly dependent on the relationship with their supervisor (e.g., Aycan, 2008). Hence, although employees may experience fit with the values of the organization they also may need a good relationship with their supervisor in order to develop strong emotional ties with their organization. Thus, both PO fit and PS fit perceptions will explain unique variance in organizational commitment. We propose:

Hypothesis 1: Employee PO fit perceptions and PS fit perceptions are independently and positively related to organizational commitment.

Hypothesis 1 proposes main effects of both PO and PS fit perceptions. Yet, the possibility that PO and PS fit may interact should be explored as well. An interaction effect would mean that employees with low PO fit but high PS fit will be significantly more committed to their organization than employees who perceive low fit on both. Hence, the negative effects of low PO fit are then buffered by high PS fit. At the same time, differences in organizational commitment due to one's high or low PS fit would be relatively small among employees with high PO fit as compared to those with low PO fit. To date, there is no research that shows how employees weigh their supervisor fit against their organizational fit. Hence, we do not know yet if PS fit perceptions have a different impact on organizational commitment depending on employees' level of PO fit or that PS fit perceptions have an additive contribution at diverse PO fit levels. As argued above, we assume the latter but because of the equivocal findings of prior studies, the lack of a good theory of multiple fits, and the lack of studies that simultaneously measured PO fit and PS fit perceptions, we will also explore the possible interaction between these fit perceptions when analyzing our data.

Employee PS fit and commitments

Commitment is a multifaceted construct that can be directed toward different foci in the organization. Besides affective reactions towards the organization as a whole, people experience other types of commitments as well, such as commitments to the unit, the team, the coworker, and the supervisor (Becker, 1992; Reichers, 1985, 1986). Among these other foci of commitment, commitment to the supervisor is the most influential one for all sorts of individual and organizational outcomes (Becker, Billing, Eveleth, & Gilbert, 1996; Chen et al., 2002; Meyer & Allen, 1997).

Previous research has found positive relationships between commitment to the supervisor and organizational commitment (Becker et al., 1996; Meyer & Allen, 1997; Vandenberghe, Bentein, & Stinglhamber, 2004; Wasti & Can, 2008) with commitment to the supervisor predicting organizational commitment rather than the reverse. Moreover, this relationship seems to exist for

collectivists in particular (Wasti, 2003, 2008) and is, therefore, significant in the cultural context of the present study. Hence, we expect to find a positive relationship between supervisory and organizational commitment. Specifically, we propose that employees' PS fit perceptions will affect employees' commitment to the supervisor and, therefore, indirectly organizational commitment.

The similarity-attraction hypothesis states that people are drawn to similar others (Byrne, 1971) because they are looking for consensual validation of their opinions and abilities and seek to maximize the consistency among the elements of their belief system. Since employees are dependent of their supervisors with regard to their rewards and career opportunities, supervisors' validating responses are important to them. The employee-supervisor relationship is of particular importance for employees in Chinese cultures (Cheng, Jiang, & Riley, 2003). Generally, people in collectivistic cultures emphasize attending to others in order to maintain a harmonious interdependence with them (Wasti, 2002). An earlier study with a Chinese sample has shown that employee perceived similarity with the supervisor was directly related to employee loyalty to the supervisor (Huang & Iun, 2006). Taken together, we hypothesize the following:

Hypothesis 2: The positive relationship between employee PS fit perceptions and organizational commitment is mediated by commitment to the supervisor.

However, employee PS fit will influence commitment to the supervisor also indirectly, namely through the quality of the employee-supervisor relationship. Employees who perceive similarities with their supervisor tend to have positive perceptions about their LMX (Engle & Lord, 1997). They describe the relationship with their leader as reciprocal and based on mutual respect and trust rather than role-defined and downward. LMX, in turn, seems to positively contribute to employees' affective reactions towards the supervisor such as satisfaction with the supervisor (Gerstner & Day, 1997) and commitment to the supervisor (Law, Wong, Wang, & Wang, 2000; Vandenberghe et al., 2004). We, therefore, expect both direct and indirect relationships between employee PS fit and supervisor commitment. We propose:

Hypothesis 3a: Employee PS fit perceptions are positively related to commitment to the supervisor.

Hypothesis 3b: The relationship proposed in H3a will be partially mediated by LMX.

Supervisor PS Fit Perceptions and Commitment to the Supervisor

When studying the simultaneous effects of PO fit and PS fit perceptions it is important to take also other forms of PS fits into account. First, PS fit concerns both the employee and the supervisor and it can thus be examined from the perspective of supervisors as well. Second, PS fit includes different aspects on which employees and supervisors can be compared. In the next paragraph, we discuss the role of supervisor fit perceptions for employees' commitment to the supervisor. Thereafter, we reflect on other PS similarities that additionally may influence employees' commitments.

Supervisor PS fit perceptions

Researchers that investigated people's PS perceptions mostly took employees' perceptions into account (Turban & Jones, 1988; Wexley et al., 1980). The PS fit perceptions of the supervisor are, however, important to examine since they do not necessarily converge with those of their employees while they may influence the quality of the leader–member relationship. Supervisor perceptions of similarity already start to affect the LMX quality in the early stage of a supervisor–employee dyad (Liden et al., 1993). These initial fit perceptions mainly concern people's *surface-level* attributes such as age and gender rather than *deep-level* attributes, such as personality (Strauss, Barrick, & Connerley, 2001), attitudes (Byrne, Clore, & Smeaton, 1986), and values (Liden et al., 1993). Researchers have used the concepts of *surface-level* and *deep-level* to describe attributes that are easy or difficult to detect (e.g., Harrison, Price, & Bell, 1998). Surface-level attributes are easy to observe and they are used to initially categorize others as similar (fit) or dissimilar (misfit). People tend to base their early deep-level fit perceptions on surface-level attributes, but after extended and more intense interactions, they may further adjust their initial deep-level fit perceptions (Harrison et al., 1998). If, over time, a supervisor perceives deep-level fit with a particular employee, he or she is more likely to trust, respect, and support that person. Supervisors have control over outcomes that are desirable to employees, such as special benefits, personal support, and approval. Thus, supervisors' PS fit perceptions may ultimately lead to employees' positive perceptions of exchange and supervisory support (Ilgen & Feldman, 1983). Employees' LMX perceptions, in turn, will influence employees' commitment to the supervisor as we have argued above. Hence, we propose the following:

Hypothesis 4: The relationship between supervisor PS fit perceptions and commitment to the supervisor is mediated by employee perceptions of LMX.

Although people's perceptions of deep-level fit determine their affective reactions towards others more so than surface-level types of fits, literatures that addressed categorization processes and the use of implicit theories have suggested that people's first similarity impressions may remain important for their behaviors over time (e.g., Engle & Lord, 1997). Studies that examined the role of surface-level demographic fit for the leader–member relationship have produced mixed results. Liden et al. (1993) showed that demographic similarity between supervisors and employees had no significant effects on the quality of this relationship over time, whereas others found that demographic similarity between supervisors and employees had a positive effect on mutual liking (e.g., Tsui & O'Reilly, 1989). We, therefore, also include surface-level fits in our study, such as fit with regard to gender (e.g., Vecchio & Brazil, 2007), age (e.g., Shore, Cleveland, & Goldberg, 2003) and educational level (Lau, Lam, & Salamon, 2008). Moreover, we incorporate a specific type of fit (guanxi) that is relevant in Chinese cultures.

Supervisor–employee Guanxi

Chinese people use the concept of guanxi to express their relationship with others (Law et al., 2000; Park & Luo, 2001; Tsui & Farh, 1997; Xin & Pearce, 1996). Guanxi refers to the relationship between two parties that is caused by similar background or shared experiences (Fei, 1947), such as the relationship of family members, relatives, countrymen and neighbors, teachers/students/classmates/schoolmates, colleagues, and friends. Once there is a certain guanxi

between two persons, a kind of social tie is formed naturally, which facilitates the interaction between them.

The power distance between supervisors and employees in Chinese cultures is relatively large, but if a supervisor and an employee have *guanxi*, this distance can be reduced. Hence, *guanxi* between supervisors and employees may facilitate the quality of their relationship. Farh, Tsui, Xin, and Cheng (1998) indeed demonstrated that employees had more trust in their supervisor when they had a certain *guanxi*. In addition, Tsui and Farh (1997) showed that the level of *guanxi* between two parties influenced their communication, mutual liking, and trust. Finally, Xin, Farh, Cheng, and Tsui (1999) demonstrated that supervisor–employee *guanxi* was significantly related to the quality of the leader–member relationship. Based on these studies, we propose that *guanxi* will positively relate to employee perceptions of LMX and thus indirectly to commitment to the supervisor.

Hypothesis 5: The relationship between supervisor–employee *guanxi* and commitment to the supervisor is mediated by employee perceptions of LMX.

Figure 1 presents our hypothesized research model. While testing this model, we also explored the role of surface-level demographic fits. In addition, we controlled for tenure and the amount of time invested in the supervisor–employee relationship since tenure may relate to employees' PO fit perceptions and organizational commitment, whereas supervisor–employee cowork time may influence employees' perceptions of exchanges and their commitment to the supervisor (e.g., Bauer & Green, 1996; Liden et al., 1993).

Method

Sample and procedure

The sample included employees and their direct supervisor from organizations of a variety of industries in Taiwan, such as finance, governmental and non-profit organizations, education, manufacturing, and technology industries. Four research assistants were involved who randomly and personally contacted supervisors and employees. They distributed a questionnaire, one to the employees and one to their immediate supervisor separately, with a cover letter and a return envelope, and they coded the questionnaires in such a way that employees and their supervisor could be matched. To ensure confidentiality, the participants were instructed to seal the return envelope and send it to the researchers. A total of 591 questionnaires were distributed to supervisors and employees, of which 525 were returned (response rate was 88.8 per cent). The final sample consisted of 360 employees and 165 supervisors, yielding 360 supervisor–employee dyads.

Supervisors' mean age was 42.63 years ($SD = 8.80$), 57.9 per cent of them were men, and they had an average tenure of 8.55 years ($SD = 4.57$). Most of them had received a bachelor or master's degree (70.7 per cent). Employees were on average 31.84 years ($SD = 8.46$), 36.7 per cent of them were men, and their organizational tenure was 4.39 years ($SD = 4.00$). Most employees had a bachelor degree (47.8 per cent). Employees' jobs were in sales (13.1 per cent), research and development (12.2 per cent), financial accounting (11.4 per cent), and marketing

(8.3 per cent). Finally, the average length of the supervisor–employee dyadic relationships was 29 months ($SD = 39.51$).

Measures

The study variables were measured with two surveys: The supervisor survey and the employee survey. The supervisor survey included demographics, measures of guanxi, and supervisor PS fit perceptions. The employee survey included demographics, and measures of LMX, supervisory commitment, organizational commitment, employee PS fit perceptions, and employee PO fit perceptions. Two measures, LMX and employee PO fit perceptions, were in English and had to be translated to Chinese. Two bilinguals with English and Chinese proficiencies performed two-way translations (Brislin, 1980). Next, three researchers reviewed the quality of the translation in order to ensure the equivalence of meaning of the Chinese and English items (Geisinger, 1994). The other measures were in Chinese and have been used in prior studies in a Chinese context (Chen et al., 2002; Cheng et al., 2003; Chuang & Shen, 2007; Farh et al., 1998).

Although some of the study variables were derived from different sources, we did realize that our employee data would be vulnerable to the inflation of correlations by common method variance due to the use of a common source. We nevertheless reasoned that employees would be better able to assess their own attitudes than independent others. However, we took care to minimize the impact of potential common method bias, as suggested by Podsakoff et al. (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, we guaranteed our participants response confidentiality. Secondly, we tried to psychologically separate the measurement of the predictor and criterion variables through the inclusion of other measures. Since our measures were part of a larger survey that included scales that were not used in the current study, we were able to separate the commitment measures, the fit measures, and the LMX measure. Thirdly, we used an analytical approach to our data that takes issues of common method variance into account.

Guanxi

The items of guanxi were adapted from Chen (1984), Chiao (1982), Farh et al. (1998), Jacobs (1979), and Yang (1992). There are in total six kinds of guanxi, including relationships of family members, relatives, countrymen and neighbors, teachers/students/classmates/schoolmates, colleagues, and friends. Supervisors were asked to check all of the above relationships between them and their employee before they worked together. Only three supervisors rated more than one type of guanxi. Therefore, guanxi was scored as “0” when the supervisor selected none of guanxi relationships, and it was scored as “1” when at least one of the relationships was indicated.

PS fit

PS fit was measured with four items derived from Chuang and Shen (2007). These researchers have evidenced the psychometric quality of this scale with samples from various industries and organizations in Taiwan. Supervisors and employees were asked to rate the extent to which they matched with their employee or supervisor, respectively, on the following attributes: Values, personality, life style, and work style. A 7-point Likert-type scale was used, ranging from 1 (not

at all) to 7 (to a great extent). The scale coefficient α was 0.88 (employee PS fit) and 0.90 (supervisor PS fit).

PO fit

Employees were asked to indicate their fit with their organization according to three items derived from Cable and DeRue (2002). An example item was: “The things that I value in life are very similar to the things that my organization values.” A 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used. The scale coefficient α was 0.91.

LMX

LMX was measured with six items derived from Graen and Uhl-Bien (1995). Employees were asked to respond to items such as: “How well does your leader understand your job problems and needs” and “How well does your leader recognize your potential.” A 5-point scale was used, ranging from 1 (not at all) to 5 (a great deal). The coefficient α was 0.87.

Organizational commitment was measured with three items reflecting identification with the organization derived from the original 5-item scale of Cheng et al.'s (2003)¹ study that was conducted in Taiwan. Employees were asked to indicate their agreement with the items on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). One of the sample items was: “I feel a sense of ownership for this organization rather than being just an employee.” The coefficient α was 0.77.

Commitment to supervisor was measured with the three identification items also derived from Cheng et al. (2003)¹. Employees were asked to indicate their agreement with the items on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). One of the sample items was: “I talk to my friends about my current supervisor as a great supervisor to work with.” The coefficient α was 0.85.

Control variables and demographic fits

In order to account for the potential effect of how long the employee stayed with the organization, we controlled for employees' *organizational tenure*. Additionally, we also controlled for length of the supervisor–employee dyadic relationship, namely *cowork time*, in months. Finally, we included the demographic variables (*gender*, *age*, and *education*) and estimated demographic fit effects.² Supervisors and employees were both asked to provide information on these demographic variables. Gender was coded as “0” designating women and as “1” designating men. Age was measured by means of 11 age categories with higher categories reflecting higher age. Education was measured with four educational levels with higher scores reflecting higher levels of education.

¹ The other two items concern the internalization dimension. The content of these items seems to overlap with our PS fit and PO fit measures and, thus, these items were not adopted.

² We performed a polynomial regression analysis including employee and supervisor demographics, their quadratic terms, and interactions (see Edwards, 2001).

Analyses

We employed the following analytical steps to test our hypotheses. First, we examined the distinctiveness of the variables based on employees' self-reports by testing different measurement models using confirmatory factor analysis (CFA) in AMOS-5 (Arbuckle, 2003). To assess model fit,³ the overall model chi-square measure (χ^2), the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993), the incremental fit index (IFI; Bollen, 1989), the comparative fit index (CFI; Bentler, 1990), and the Tucker-Lewis index (TLI; Tucker & Lewis, 1973) were used. We compared a 5-factor model with two 4-factor models, a 3-factor model, a 2-factor model, and a 1-factor model using the χ^2 difference test (Bentler & Bonett, 1980). In the 5-factor model, LMX, PO fit, employee PS fit, commitment to the supervisor, and organizational commitment were treated as five independent factors. In the first 4-factor model, commitment to the supervisor and organizational commitment were loaded on one factor. In the second 4-factor model, LMX and commitment to the supervisor were loaded on one factor. In the 3-factor model, LMX and both commitment measures were loaded on one factor. The 2-factor model distinguished two factors, one including the two fit measures, and the other one including LMX and the two commitment measures. In the 1-factor model, all variables were loaded on one factor.

Second, we tested our proposed research model (see Figure 1) using structural equation modeling (SEM; Jöreskog & Sorbom, 1993) in AMOS. Comparisons with reasonable alternative models are recommended in order to show that the hypothesized model is the best model (e.g., Kelloway, 1998). We, therefore, also included several alternative models and utilized the change in χ^2 test (Bentler & Bonett, 1980).

Because relationships among the employee variables could be flawed due to common method bias, we tested our final structural model by applying the common method factor approach as recommended by Podsakoff et al. (2003). That is, we added a latent method factor to our model with all manifest employee measures as indicators. We tested whether the model parameters of our final model (without the method factor) was comparable to the model including the method factor (e.g., Elangovan & Xie, 1999).

Results

Table 1 reports the means, standard deviations, and intercorrelations among the study variables. As can be seen, tenure and cowork time were significantly related to some of the independent and dependent variables. Employees' tenure was significantly related to age similarity ($r = -0.18, p < 0.01$), guanxi ($r = 0.13, p < 0.05$), LMX ($r = 0.13, p < 0.05$), and organizational commitment ($r = 0.14, p < 0.01$). Cowork time was significantly related to LMX ($r = 0.13, p < 0.05$) and organizational commitment ($r = 0.19, p < 0.01$). In our further analyses, we examined whether we should control for these demographic variables.

³ For missing data, we used the scale average to replace the missing data. If the missing items are equal to or exceeding 50 per cent of the scale, we removed the scale value to avoid any bias. All scales met the distributional assumptions or slightly non-normality (Lei & Lomax, 2005). Maximum likelihood (ML) works well under slightly non-normal conditions (Muthén & Kaplan, 1985) and ML is relatively insensitive to variations in sample size and kurtosis (Olsson, Foss, Troye, & Howell, 2000). Therefore, we used ML as the estimator.

Table 1. Means, standard deviations, and correlations of the study variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Tenure ^a	3.39	2.28												
2. Cowork time ^a	29.23	39.51	0.51**											
3. Gender similarity	0.43	0.50	-0.04	0.04										
4. Age similarity	8.02	9.33	-0.18**	-0.08	0.16**									
5. Education similarity	1.03	1.55	-0.06	-0.11	0.13*	0.04								
6. Guanxi ^b	0.25	0.43	0.13*	0.05	-0.04	-0.06	0.05							
7. Supervisor PS fit	4.27	1.04	0.10	0.07	-0.02	-0.03	-0.02	0.13*	(0.90)					
8. Employee PS fit	4.02	1.05	0.03	-0.01	-0.09	-0.07	0.04	0.11*	0.23**	(0.88)				
9. Employee PO fit	4.04	0.98	0.02	0.11*	0.03	-0.02	-0.07	0.14*	0.13*	0.46*	(0.91)			
10. Employee LMX	3.51	0.73	0.13*	0.13*	-0.09	-0.08	-0.10	0.14*	0.27**	0.52*	0.31**	(0.87)		
11. Commitment to supervisor	3.55	0.83	0.00	0.07	-0.11*	-0.01	0.01	0.12*	0.22**	0.68**	0.43**	0.62**	(0.85)	
12. Organizational commitment	3.19	0.78	0.14**	0.19**	0.00	0.01	0.06	0.07	0.23**	0.46**	0.60**	0.31**	0.53**	(0.77)

Note: Due to missing values, *N* varies from 330 to 355.

^a As reported by employees. ^b As reported by supervisors. * $p < 0.05$; ** $p < 0.01$.

Preliminary analyses

Correlations among the employee measures were all significant (see Table 1) and ranged from 0.31 to 0.68. We tested whether these five measures were different constructs rather than one construct. We conducted several confirmatory factor analyses with ML estimation to compare the five-factor model with alternative models: Two four-factor models, a three-factor, a two-factor, and a one-factor model, respectively. Table 2 shows that the five-factor model ($\chi^2 = 320.03$, $df = 142$, RMSEA = 0.06, CFI = 0.95, TLI = 0.94, IFI = 0.95) yielded a better fit to the data than the alternative models. Thus, the data showed statistical support for treating the employee measures as distinctive constructs.

Table 2. Confirmatory factor analysis

		χ^2	<i>df</i>	RMSEA	CFI	TLI	IFI
1	5-Factor model ^a	320.03	142	0.06	0.95	0.94	0.95
2	4-Factor model 1 ^b	514.09	146	0.09	0.90	0.88	0.90
3	4-Factor model 2 ^c	543.03	146	0.10	0.89	0.87	0.89
4	3-Factor model ^d	784.92	149	0.12	0.82	0.80	0.82
5	2-Factor model ^e	1261.90	151	0.16	0.69	0.65	0.69
6	1-Factor model ^f	1479.68	152	0.17	0.63	0.58	0.63

^a Includes employee PS fit, PO fit, LMX, supervisory commitment, and organizational commitment. ^b Includes employee PS fit, PO fit, LMX, and a factor combining supervisory commitment and organizational commitment.

^c Includes employee PS fit, PO fit, organizational commitment, and a factor combining LMX and supervisory commitment. ^d Includes employee PS fit, PO fit, and a factor combining LMX, supervisory commitment, and organizational commitment. ^e A factor combining employee PS fit and PO fit, and a factor combining LMX, supervisory commitment, and organizational commitment. ^f Includes one factor combining all five constructs.

Hypotheses testing

Hypothesis 1 predicted that employee PO fit and PS fit perceptions would be independently and positively related to organizational commitment (*Hypothesis 1*). Although not hypothesized, we also wanted to explore the possibility of an interaction between employee PO fit and PS fit perceptions. We, therefore, first tested the relationships between employee PO fit and PS fit and organizational commitment with a hierarchical regression analysis. Demographic variables (age, gender, education, tenure, and cowork time) were entered in the first step of the regression equation. Employee PO fit and PS fit perceptions were entered in the second step and the interaction of the two fit perceptions was added in the third step (see Table 3). To avoid multicollinearity, all independent variables were centered before calculating the interaction terms (Aiken & West, 1991). Both employee PO fit and PS fit perceptions were significantly related to organizational commitment ($\beta = 0.48, p < 0.0001$, and $\beta = 0.26, p < 0.0001$, respectively) ($R^2 = 0.42$; $F(7, 307) = 31.64, p < 0.0001$). The interaction term did not explain additional variance in organizational commitment ($\Delta R^2 = 0.00, F_{\text{change}}(1, 306) = 1.85, ns$). Hence, Hypothesis 1 was supported.⁴

Table 3. Regression analysis predicting organizational commitment

	Organizational commitment	
	β	<i>SE</i>
Gender	-0.02	0.07
Age	0.00	0.03
Education	-0.04	0.04
Tenure	0.06	0.02
Cowork time	0.10	0.00
ΔR^2		0.05**
Employee PS fit	0.26***	0.04
Employee PO fit	0.48***	0.04
ΔR^2		0.37***
R^2		0.42
F		31.64***
PS fit \times PO fit	0.06	0.03
ΔR^2		0.00
R^2		0.42
F		27.99***

** $p < 0.01$; *** $p < 0.001$.

A comprehensive test of our hypotheses and proposed research model was performed with SEM. We first examined if the inclusion of control variables such as organizational tenure, cowork time, and demographic (fit) variables (gender, age, and education) would affect the fit of our final model to the data. Only organizational tenure contributed to model fit. For reasons of parsimony, we decided to exclude the other control variables from our further analyses. Our hypothesized model (see Figure 1) including all manifest measures and latent factors (Figure 1 presents the latent factors only) showed a good fit to the data ($\chi^2(267) = 514.28, p = 0.00, RMSEA = 0.06, CFI = 0.94, TLI = 0.94, IFI = 0.94$). In this model, we allowed for a relationship between employee PO fit and PS fit without specifying a direction.⁵

⁴ We additionally tested for main and interaction effects of employee PS fit perceptions and commitment to the supervisor. However, this interaction term was also not significant.

⁵ Specifying a direction did not significantly improve the fit to the data.

Hypothesis 2 proposed that the relationship between employee PS fit and organizational commitment would be mediated by commitment to the supervisor. We compared our hypothesized mediation model to a model in which we included both direct and indirect paths from employee PS fit to organizational commitment (Table 4, Model 1). The fit of this competitive model did not improve as compared to the hypothesized model ($\Delta\chi^2 = -0.37$ ($\Delta df = 1$), $\chi^2(266) = 513.91$, $p = 0.00$, RMSEA = 0.06, CFI = 0.94, TLI = 0.94, IFI = 0.94). This finding supports Hypothesis 2.

Table 4. Competitive model test

	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	RMSEA	CFI	TLI	IFI
Hypothesized model	514.28	267	1.93			0.06	0.94	0.94	0.94
Competitive model 1 ¹	513.91	266	1.93	-0.37	1	0.06	0.94	0.94	0.94
Competitive model 2 ¹	586.37	268	2.19	72.09	1	0.06	0.93	0.92	0.93
Competitive model 3 ¹	604.85	268	2.26	90.57	1	0.06	0.92	0.91	0.92
Competitive model 4 ¹	513.97	266	1.93	-0.31	1	0.06	0.94	0.94	0.94
Final model ¹	423.98	248	1.71	90.30	19	0.05	0.96	0.95	0.96

¹ Models are compared to the Hypothesized Model; Model 1 estimated both direct and indirect paths from employee PS fit to organizational commitment; Model 2 only estimated an indirect path from employee PS fit to supervisory commitment through LMX; Model 3 only estimated a direct path from employee PS fit to supervisory commitment; Model 4 estimated both direct and indirect paths from supervisor PS fit to supervisory commitment; the Final Model included a common method factor with all manifest employee measures.

We hypothesized direct and indirect (through LMX) relationships between employee PS fit and commitment to the supervisor (*Hypotheses 3a and 3b*). For testing these hypotheses, we compared our hypothesized model with two competitive models: One that only estimated the indirect path between employee PS fit and commitment to the supervisor through LMX, and one that only estimated the direct path between employee PS fit and commitment to the supervisor. The fit of these two competitive models (see Table 4, Models 2 and 3) decreased (Model 2: $\Delta\chi^2 = 72.09$ ($\Delta df = 1$), $\chi^2(268) = 586.37$, $p = 0.00$, RMSEA = 0.06, CFI = 0.93, TLI = 0.92, IFI = 0.93; Model 3: $\Delta\chi^2 = 90.57$ ($\Delta df = 1$), $\chi^2(268) = 604.85$, $p = 0.00$, RMSEA = 0.06, CFI = 0.92, TLI = 0.91, IFI = 0.92), indicating both direct and indirect relationships between employee PS fit and commitment to the supervisor. Hypotheses 3a and 3b were supported.

Furthermore, we tested the relationships between supervisor PS fit perceptions, employees' perceptions of LMX, and commitment to the supervisor. We proposed that LMX would function as a mediator in the relationship between supervisors' PS fit perceptions and employees' commitment to the supervisor (*Hypothesis 4*). Because half of the supervisors (82 out of 165) had rated their PS fit perceptions for more than one employee, we first tested if the relationship between supervisors' PS fit perceptions and employees' LMX was confounded by unit-level effects. This was, however, not the case.⁶ We further explored the possibility of partial rather

⁶ We have investigated whether non-independence in (part of) the data (that concerns supervisor PS fit perceptions) was introduced by random intercepts (variation in mean scores between supervisors) or random slopes (the extent to which the relationship between supervisor PS fit and employee LMX varies across supervisors). Multilevel analyses showed that 9 per cent of the variance in employee LMX was explained by variance of intercepts, but this variance was not significant. Furthermore, the fit of a random intercept and slope model was not a better fit to the data than a random intercept model ($\Delta -2 \log \text{likelihood} = 3.902$, $\Delta df = 1$, *ns*). This indicates that the slopes did not vary between supervisors. Moreover, the parameter estimate of the random intercept and slope model ($\gamma_{01} = .20$) was comparable

than full mediation of LMX by allowing a direct path from supervisor PS fit to commitment to the supervisor. The fit of this competitive model (Table 4, Model 4) as compared to our hypothesized model, however, did not improve ($\Delta\chi^2 = -0.31$ ($\Delta df = 1$), $\chi^2(266) = 513.97$, $p = 0.00$, RMSEA = 0.06, CFI = 0.94, TLI = 0.94, IFI = 0.94) and the standardized path coefficient was non-significant ($\gamma = 0.03$, *ns*). This result indicates that the relationship between supervisor PS fit and commitment to the supervisor was fully mediated by employee LMX perceptions, which confirms Hypothesis 4. We hypothesized a relationship between supervisor–employee guanxi and commitment to the supervisor as mediated by employee perceptions of LMX (*Hypothesis 5*). Yet, the path parameter from guanxi to LMX was non-significant ($\gamma = 0.07$, *ns*). Hypothesis 5 was rejected.

In addition, we compared our hypothesized model with other alternative models, estimating paths from: Organizational commitment to commitment to the supervisor ($\Delta\chi^2 = 21.53$, $\Delta df = 0$, $\chi^2(267) = 535.81$, $p = 0.00$, RMSEA = 0.06, CFI = 0.94, TLI = 0.93, IFI = 0.94), LMX to supervisor PS fit ($\Delta\chi^2 = 33.51$, $\Delta df = 1$, $\chi^2(268) = 547.79$, $p = 0.00$, RMSEA = 0.06, CFI = 0.94, TLI = 0.93, IFI = 0.94), commitment to the supervisor to supervisor PS fit ($\Delta\chi^2 = 163.60$, $\Delta df = 2$, $\chi^2(269) = 677.88$, $p = 0.00$, RMSEA = 0.07, CFI = 0.91, TLI = 0.90, IFI = 0.91), LMX to employee PS fit ($\Delta\chi^2 = 67.38$, $\Delta df = 2$, $\chi^2(269) = 581.66$, $p = 0.00$, RMSEA = 0.06, CFI = 0.93, TLI = 0.92, IFI = 0.93), and commitment to the supervisor to employee PS fit ($\Delta\chi^2 = 69.50$, $\Delta df = 3$, $\chi^2(270) = 583.78$, $p = 0.00$, RMSEA = 0.06, CFI = 0.93, TLI = 0.92, IFI = 0.93). These findings showed that none of these models were better fit to the data than the hypothesized model.

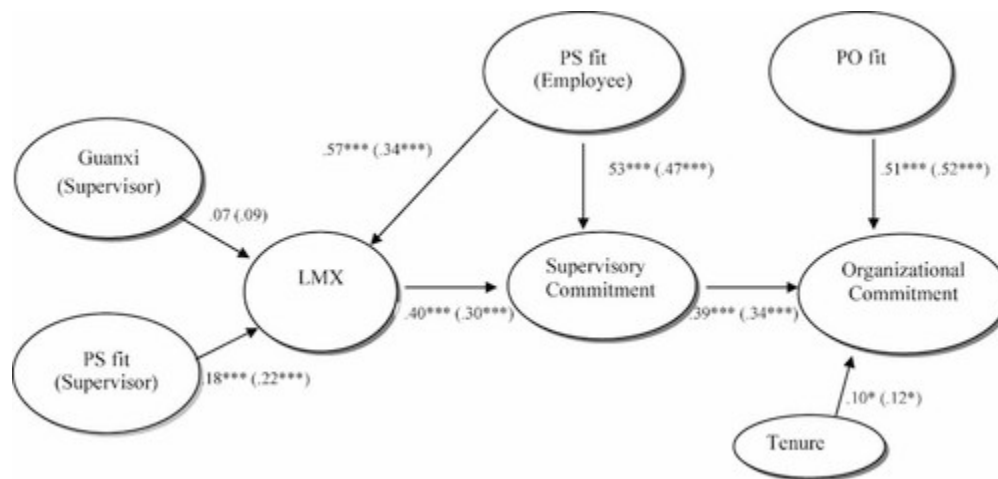


Figure 2. Final model. Parameter estimates in parentheses concern the final model including the latent common method factor

Finally, in order to examine whether relationships among the employee variables might be flawed due to common method bias, we added a common method factor to our hypothesized model (Podsakoff et al., 2003) with all manifest employee measures (the 19 items of the five employee scales) as its indicators. The inclusion of the latent method factor (Table 4, Final Model), indeed, resulted in a model with an improved fit to the data ($\Delta\chi^2 = 90.30$,

to the parameter estimate in the SEM analysis (0.18), and both were highly significant ($p = 0.000$). Based on these analyses, we believe that non-independence did not affect our findings.

$\Delta df = -19$, $\chi^2(248) = 423.98$, $p = 0.00$, RMSEA = 0.05, CFI = 0.96, TLI = 0.95, IFI = 0.96). However, the path coefficients in this model remained significant and highly similar to the ones of the modified model (see Figure 2). These results suggest that the relationships among the variables were not inflated by common method bias.

Discussion

With this study we aimed to fill the gap in multidimensional fit research that simultaneously assesses people's PO and PS fit perceptions. Investigating the distinctiveness of these fit perceptions and the way in which they relate to individual and organizational outcomes is theoretically as well as practically important. Current PE fit theories stress that people's fit perceptions matter for their affective reactions and work behaviors, but there is no comprehensive theory that explains how people cognitively distinguish and emotionally integrate their different fits. The present study may contribute to building such theory by examining employees' fit perceptions with regard to two salient aspects of the work environment that seem closely tied, the leader and the organizational culture. We examined the strength and form of the relationships between employees' PO and PS fit perceptions and their affective reactions towards the organization. We did this while also including variables that could explain these relationships (LMX and commitment to the supervisor) or affect their strengths (supervisor PS fit perceptions and surface-level fits). Moreover, this study was performed in a Chinese cultural context that emphasizes a strong alliance between organizations and their leaders.

As proposed, we found that employees distinguish between their PO fit and PS fit perceptions and both were independently related to organizational commitment. Employees' PO fit perceptions were most strongly linked to organizational commitment, which corroborates previous studies (Kristof-Brown et al., 2005). However, employees' PS fit perceptions could explain an additional amount of variance in organizational commitment. We explored the possibility that employees' PO and PS fit perceptions would interact, but no such interaction effect was found. Instead, we showed that if employees perceived supervisor fit, they felt more strongly committed to the supervisor which, in turn, facilitated their commitment to the organization as a whole. Moreover, we found that employees' PS fit perceptions were directly as well as indirectly, through LMX, linked to supervisor commitment. Employees who perceive deep-level similarities with their supervisor experience a higher quality of LMX and are, thus, more attached to their supervisor.

Because we aimed to get a thorough understanding of other fit factors that could contribute to employees' commitments, we also included supervisors' PS fit perceptions in our research design. We hypothesized that supervisors' PS fit perceptions would affect the quality of the leader–employee exchange relationship which, in turn, would influence employees' commitment to the supervisor. Our results support this contention. Employees reported a higher level of LMX to the extent that their supervisor experienced deep-level similarities with them. The strength of this relationship corresponds to the ones that were found in the few previous studies that assessed similarity perceptions from the supervisor's perspective (e.g., Engle & Lord, 1997; Liden et al., 1993).

In our research model, we controlled for the possible influence of surface-level fit variables, such as relational demographics, because we did not expect fit effects for these variables given the length of the employee–supervisor relationship. The effects of initial categorization based on demographic (dis)similarity seem to fade away after extended interaction between dyad partners (Harrison et al., 1998; Tsui, Egan, & Porter, 1994). Our non-significant results for demographic similarities confirm this notion.

As opposed to the expected minor role of demographic similarities, we thought that *guanxi*, a fit variable that is unique for the Chinese culture, would relate to employees' perceived LMX and commitment to the supervisor. This proposition was not confirmed. To date, there are no studies that examined the influence of *guanxi* together with the deep-level PS fit perceptions of leaders and members. Earlier studies only compared *guanxi* with demographic similarity and found effects for the first but not for the second type of similarity on LMX (Farh et al., 1998). The overall correlations with *guanxi* in our study were, however, rather small. This finding may point to the influence of modernism in Chinese cultures whereby Chinese employees dissociate themselves from the Chinese traditional values and replace these with the more Western ones (e.g., Tsui & Farh, 1997). Therefore, work relationships may have become less dependent on particularistic ties as formed in a shared history. However, an alternative explanation for our findings may be that our *guanxi* measure was less adequate to detect significant relationships. We will further address this option when discussing the limitations of our study.

Limitations

Several limitations of this study should be recognized. First, our study design is cross-sectional. For testing our model it would have been most optimal if we could have measured fit perceptions, employee–supervisor exchange and employees' commitments over time. Unfortunately, practical obstacles in field settings such as loss of response over time and problems with sustained cooperation of organizations, often refrain researchers from conducting their ideal longitudinal research, as was the case in this study. Hence, it is difficult to infer how relationships may have developed and whether people's fit perceptions may have affected their commitments. However, we have tested our research model against alternative models in which we changed the direction of the proposed relationships. These models were less optimal than our hypothesized one. In addition, based on theoretical arguments as well as previous research, we believe that our independent variables (fits and LMX) are the initial predictors of affective commitments rather than the reverse.

Second, although some of the study variables were derived from different sources, our employee data were vulnerable to common method variance. We addressed this issue carefully in our design of the study and we tested the relationships among the variables for the influence of a common method factor. This influence was indeed established, but it did not in any way weaken our findings. Therefore, we conclude that common method variance is not of a substantial concern in our study.

Third, as opposed to the demographic fit measures, individuals' deep-level fit was established with measuring fit *perceptions* rather than actual fit. We chose to measure employees' and supervisors' fit perceptions because perceptions are a more proximal predictor of individual

outcomes (Cable & Judge, 1996; Edwards, Caplan, & Harrison, 1998). For instance, Cable and Judge found that the match between job seekers' perceptions of an organization's values and their perceptions of their own values positively associated with their perceived fit with the organization and that this perceived PO fit affected their job choice intentions. Therefore, while actual fit has its merits such as objectively assessing fit through explicit comparisons of separately rated P and O variables, we feel that perceived fit is better suited in the current research framework.

Fourth, we have chosen specific operationalizations for the commitment and guanxi measures. Commitment was measured with only three items that reflect identification with the organization. We chose not to include internalization items that refer to similarity in values because of their overlap with the fit constructs. Including these items would have caused invalid conclusions concerning the fit and commitment relationships. Instead, we have selected (Chinese) commitment items that are comparable to the ones that have been used in prior fit studies (e.g., Cable & Edwards, 2004). Guanxi was operationalized as a quantity measure which is quite common in the guanxi literature (Chou, Cheng, Huang, & Cheng, 2006; Farh et al., 1998; Tsui & Farh, 1997). However, our non-significant guanxi results may be caused by the restricted way in which guanxi was operationalized. Moreover, the supervisors in our sample rated relatively few guanxi relationships, which decrease the variance and, thus, the explanatory power of the guanxi measure. Some other researchers have measured quality of guanxi (Law et al., 2000; Xin & Pearce, 1996). Law et al. operationalized the quality of the relationship with a six-item scale reflecting “behaviors/activities that employees would do for supervisors with whom they had good guanxi” (p. 754). Future research in the Chinese context may take both the quality and the quantity of guanxi into consideration in addition to measures of LMX and deep-level fits.

Finally, the question is whether the relationships that were found in this study can be generalized to other organizations than the Chinese ones. Wasti (2003) has found, for instance, that satisfaction with the supervisor was an important determinant of organizational commitment particularly for employees with collectivistic values. The few studies that investigated employees' supervisory and organizational commitments in a Western context have shown various results. Becker et al. (1996), for example, reported a strong relationship whereas Hunt and Morgan (1994) found a rather weak relationship between both commitments. These inconclusive findings suggest that specific contextual factors may moderate the relationship between the two types of commitments. Below, we will further elaborate on the role of contextual factors when discussing the theoretical and practical implications of our study.

Theoretical and practical implications

The current study integrates and contributes to three important domains of organizational theory and research: Theories that address people's person–environment fit, theories that seek to explain people's attachment to and involvement in their organization, and theories regarding the development and quality of LMXs. We believe that this study has some important implications for person–environment fit theory. First, despite the generally strong tie between leaders and organizations in Chinese cultures, we have shown that employees differentiate between their fit with the supervisor and the culture of the organization. This finding suggests that the

relationships between these fit perceptions and employees' affective outcomes as found in earlier studies were not confounded.

Second, despite earlier notions about the likely interplay of different fits, where one type of fit buffers misfit on another one (Jansen & Kristof-Brown, 2006), this study did not find such an interaction effect. This finding and the ones from earlier multidimensional fit studies offer new avenues for future fit research. As described above, the sparse multidimensional fit studies showed equivocal results with respect to the interaction of fits. Notably, the few interaction effects that were found concerned the combination of PJ fit (Demands-Abilities and Need-Supplies) on the one hand and PO or PG fit on the other hand. The first category of fits (PJ, NS, DA) is referred to as complementary fit (one entity provides what the other needs) and this category particularly concerns the content of jobs. The second category of fits (PO, PG, and PS) is referred to as supplementary fit (entities share similar fundamental characteristics) and this category concerns the social/relational context of jobs. The study results to date seem to suggest additive fit effects *within* fit categories (supplementary or complementary) and interactive effects *between* fit categories. Although people are able to distinguish between their different fits within categories, they may nevertheless combine these fits into two higher order domains: (supplementary) fit with the social context of the job, and (complementary) fit with the content of the job. The overall perceived fit with the social context of the job then may be the sum of PO, PG, and PS fits. In a similar vein, the overall fit with the content of the job may be the sum of PJ, NS, and DA fits. On the other hand, if employees perceive supplementary misfit, this may be buffered by high complementary fit and vice versa. All in all, based on our findings and those of prior research, we suggest a Theory of Multiple Fits that predicts additive effects of similar types of fits and interactive effects of different types of fits.

Through simultaneously examining employees' and supervisors' PS fit perceptions we integrated two important domains of organizational research: Research on employee organizational commitment and research on the development and quality of LMXs. We tested a comprehensive model in which multiple supervisor and employee fits were linked to organizational commitment via LMX and commitment to the supervisor. With this approach we extended previous research that only tested separate pieces of this process model. Employee PS fit perceptions were most strongly (directly as well indirectly) related to commitment to the supervisor whereas PO fit perceptions were most strongly linked to organizational commitment. However, employees' PO fit perceptions and their supervisory commitment together could explain a substantial amount of variance in organizational commitment. Furthermore, LMX seems to play a central role in the forming of supervisory and organizational commitments.

This brings us to contextual factors that may have influenced our study findings. The default context for organizational studies is the Western culture. Unfortunately, researchers seldom address the potential limitations of this Western context for their study findings. We encourage researchers to replicate the findings of our study in other cultural contexts. Although Chinese organizations may have adopted some of the Western values, they still adhere more to hierarchies and power-distance as compared to most Western organizations (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Organizational leaders in Chinese cultures are important sources of identification and they, therefore, may also influence people's identification with the organization as a whole. Hence, supervisory commitment may be stronger linked to

organizational commitment in high power-based cultures than in low-power based cultures. Future research could test this proposition. Furthermore, the strength and form of PO fit and PS fit relationships could be affected by the specific cultural context as well. While the Taiwanese employees in this study distinguished between their PO fit and PS fit perceptions, they may have psychologically combined these fits in an additive way particularly because of their collectivistic cultural values.

We believe that this study has some practical implications as well. First, employees' perceived quality of the LMX was not only related to their own PS fit perceptions but also those of their supervisor. Supervisors who perceive a personal match with their employees apparently signal more support than supervisors who do not feel such a match. However, the supervisor role should include the provision of support, irrespective of personal liking. Thus, supervisors could be made aware of this phenomenon and trained to fulfill their leadership roles irrespective of their personal fits. In addition, given the significant role of employees' PS fit perceptions, supervisors could influence employees' PS fit perceptions by exploring and emphasizing the specific interests and values they share with each of them.

Second, employees' attachment to the organization does not only depend on their fit with organizational values but also on their fit with and attachment to the supervisor. Especially in Chinese organizations there is a triangular relationship between the organization, the supervisor, and the employee. Employees' attachment to the organization is suboptimal if they fit organizational values but not those of their supervisor, or vice versa.

In reality, personnel recruitment and selection are particularly focused on establishing applicant prospective organizational fit. Recruiters are, however, seldom able to assess applicant PO fit during selection (e.g., Cable & Judge, 1997; Higgins & Judge, 2004). In a similar vein, applicants usually have relatively little information about the organization for assessing their prospective PO fit. The results of the present study suggest that it would be in the interest of applicants as well as organizations to also focus on prospective applicant-supervisor fit. This type of fit may be feasible to establish and could serve as the baseline for the further exploration and development of PO fit. Moreover, future research that examines the role of recruiter characteristics and behaviors for applicant attraction could specifically address those of (recruiting) supervisors.

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References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publication.
- Arbuckle, J. L. (2003). AMOS 5.0 [computer software], SPSS, Chicago, IL.
- Aycan, Z. (2008). Cross-cultural approaches to leadership. In P. B. Smith, M. F. Peterson, & D. C. Thomas (Eds.), *The handbook of cross cultural management research* (pp. 219–238). Thousand Oaks, CA: Sage Publications, Inc.
- Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, **39**, 1538–1567.
- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, **35**, 232–244.
- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, **39**, 464–482.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, **107**, 238–249.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, **88**, 588–606.
- Bollen, K. A. (1989). *Structural equations with latent variables*. New York: Wiley.
- Bretz, R. D. Jr., & Judge, T. A. (1994). Person-organization fit and the theory of work adjustment: Implications for satisfaction, tenure, and career success. *Journal of Vocational Behavior*, **44**, 32–54.
- Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C. Triandis, & J. W. Berry (Eds.), *Handbook of cross-cultural psychology* (vol. 2, pp. 349–444). Boston, MA: Allyn & Bacon.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Newbury Park, CA: Sage.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Byrne, D., Clore, G. L., & Smeaton, G. (1986). The attraction hypothesis: Do similar attitudes affect anything? *Journal of Personality and Social Psychology*, **51**, 1167–1170.

- Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, **87**, 875– 884.
- Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology*, **89**, 822– 834.
- Cable, D. M., & Judge, T. A. (1996). Person-organization fit, job choice decisions, and organizational entry. *Organizational Behavior & Human Decision Processes*, **67**, 294– 311.
- Cable, D. M., & Judge, T. A. (1997). Interviewers' perceptions of person—organization fit and organizational selection decisions. *Journal of Applied Psychology*, **82**, 546– 561.
- Chen, M. Z. (1984). The family culture and business administration. In K. S. Yang, G. G. Huang, & Z. R. Zhuang (Eds.), *The conference of the Chinese Management*. Taipei: Department of Psychology of National Taiwan University.
- Chen, Z. X., Tsui, A. S., & Farh, J. L. (2002). Loyalty to supervisory vs. organizational commitment: Relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, **75**, 339– 356.
- Cheng, B., Jiang, D., & Riley, J. H. (2003). Organizational commitment, supervisory commitment, and employee outcomes in the Chinese context: Proximal hypothesis or global hypothesis? *Journal of Organizational Behavior*, **24**, 313– 334.
- Chiao, C. (1982). A preliminary discussion of guanxi. In K. S. Yang, & C. Y. Wen (Eds.), *The Sinicization of social and behavioral science research in China*. Taipei: Institute of Ethnology of Academia Sinica.
- Chou, L. F., Cheng, B. S., Huang, M. P., & Cheng, H. Y. (2006). Guanxi networks and members' effectiveness in Chinese work teams: Mediating effects of trust networks. *Asian Journal of Social Psychology*, **9**, 79– 95.
- Chuang, A. C., & Shen, C. T. (2007). The perceived person-environment fit scale (PPEFS): Development of four fit measures. *Paper Accepted for Presentation at the Annual Conference of the Academy of Management*, Philadelphia, PA, USA.
- Cooper-Thomas, H. D., van Vianen, A. E. M., & Anderson, N. (2004). Changes in person-organization fit: The impact of socialization tactics on perceived and actual P-O fit. *European Journal of Work and Organizational Psychology*, **13**, 52– 78.
- Downey, H. K., Hellriegel, D., & Slocum, J. R. Jr., (1975). Congruence between individual needs, organizational climate, job satisfaction and performance. *Academy of Management Journal*, **18**, 149– 155.
- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods*, **4**, 264– 286.
- Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, **94**, 654– 677.

- Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28–67). Oxford, England: Oxford University Press.
- Elangovan, A. R., & Xie, J. L. (1999). Effects of perceived power of supervisor on subordinate stress and motivation: The moderating role of subordinate characteristics. *Journal of Organizational Behavior*, **20**, 359–373.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, **40**, 988–1010.
- Farh, J. L., & Cheng, B. S. (2000). A cultural analysis of paternalistic leadership in Chinese organizations. In J. T. Li, A. S. Tsui, & E. Weldon (Eds.), *Management and organizations in the Chinese context* (pp. 84–127). London: Macmillan.
- Farh, J. L., Earley, P. C., & Lin, S. C. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, **42**, 421–444.
- Farh, J. L., Tsui, A. S., Xin, K., & Cheng, B. S. (1998). The influence of relational demography and guanxi: The Chinese case. *Organization Science*, **9**, 471–487.
- Fei, X. T. (1947). *Native soil in Chinese and native soil reconstruction*. Hong Kong: Feng Huang.
- Geisinger, K. F. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment*, **6**, 304–312.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, **82**, 827–844.
- Giberson, T. R., Resick, C. J., & Dickson, M. W. (2005). Embedding leader characteristics: An examination of homogeneity of personality and values in organizations. *Journal of Applied Psychology*, **90**, 1002–1010.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, **6**, 219–247.
- Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal*, **41**, 96–107.
- Higgins, C. A., & Judge, T. A. (2004). The effect of applicant influence tactics on recruiter perceptions of fit and hiring recommendations: A field study. *Journal of Applied Psychology*, **89**, 622–632.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The globe study of 62 societies*. Thousand Oaks, CA: Sage.

- Huang, X., & Iun, J. (2006). The impact of subordinate-supervisor similarity in growth-need strength on work outcomes: The mediating role of perceived similarity. *Journal of Organizational Behavior*, **27**, 1121– 1148.
- Hunt, S. D., & Morgan, R. M. (1994). Organizational Commitment: One of many commitments or key mediating construct? *Academy of Management Journal*, **37**, 1568– 1587.
- Ilgen, D. R., & Feldman, J. M. (1983). Performance appraisal: A process focus. *Research in Organizational Behavior*, **5**, 141– 197.
- Jacobs, J. B. (1979). The concept of guanxi and local politics in a rural Chinese cultural setting. In S. L. Greenblatt, R. W. Wilson, & A. A. Wilson (Eds.), *Social interaction in Chinese society* (pp. 209– 236). New York: Praeger.
- Jansen, K. J., & Kristof-Brown, A. (2006). Toward a multidimensional theory of person-environment fit. *Journal of Managerial Issues*, **18**, 193– 212.
- Jöreskog, K. G., & Sorbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS Command Language*. Chicago: Scientific Software International Inc.
- Joyce, W. F., & Slocum, J. W. (1990). Strategic context and organizational climate. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 130– 150). San Francisco: Jossey-Bass.
- Kelloway, E. K. (1998). *Using LISREL for structural equation modeling: A research's guide*. Thousand Oaks, CA: Sage Publications.
- Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person-job and person-organization fit. *Personnel Psychology*, **53**, 643– 671.
- Kristof-Brown, A. L., Jansen, K. J., & Colbert, A. E. (2002). A policy-capturing study of the simultaneous effects of fit with jobs, groups, and organizations. *Journal of Applied Psychology*, **87**, 985– 993.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, **58**, 281– 342.
- Lau, D. C., Lam, L. W., & Salamon, S. D. (2008). The impact of relational demographics on perceived managerial trustworthiness: Similarity or norms? *The Journal of Social Psychology*, **148**, 187– 208.
- Lauver, K. J., & Kristof-Brown, A. L. (2001). Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, **59**, 454– 470.
- Law, K. S., Wong, C., Wang, D., & Wang, L. (2000). Effect of supervisor-subordinate guanxi on supervisory decision in China: An empirical investigation. *International Journal of Human Resource Management*, **11**, 751– 765.

- Lei, M., & Lomax, R. G. (2005). The effect of varying degrees of nonnormality in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, **12**, 1– 27.
- Liden, R., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, **78**, 662– 674.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.
- Muthén, B., & Kaplan, D. (1985). A comparison of some methodologies for the factor analysis of non-normal Likert variables. *British Journal of Mathematical and Statistical Psychology*, **38**, 171– 189.
- Olsson, U. H., Foss, T., Troye, S. V., & Howell, R. D. (2000). The performance of ML, GLS, & WLS estimation in structural equation modeling under conditions of misspecification and nonnormality. *Structural Equation Modeling*, **7**, 557– 595.
- Park, S. H., & Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. *Strategic Management Journal*, **22**, 455– 477.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, **88**, 879– 903.
- Redding, S. G. (1990). *The spirit of Chinese capitalism*. New York: Walter de Gruyter.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review*, **10**, 465– 476.
- Reichers, A. E. (1986). Conflict and organizational commitments. *Journal of Applied Psychology*, **71**, 508– 514.
- Resick, C. J., Baltes, B. B., & Walker-Shantz, C. (2007). Person-organization fit and work related attitudes and decisions: Examining interactive effects with job fit and conscientiousness. *Journal of Applied Psychology*, **92**, 1446– 1455.
- Saks, A. M., & Ashforth, B. E. (1997). A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology*, **50**, 395– 426.
- Schein, E. H. (2004). *Organizational culture and leadership*. San Francisco, CA: John Wiley and Sons, Inc.
- Schneider, B. (2001). Fits about fit. *Applied Psychology: An International Review*, **50**, 141– 152.
- Schneider, B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. *Personnel Psychology*, **48**, 747– 773.
- Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. *Journal of Applied Psychology*, **83**, 462– 470.

- Shore, L. M., Cleveland, J. N., & Goldberg, C. B. (2003). Work attitudes and decisions as a function of manager age and employee age. *Journal of Applied Psychology*, **88**, 529– 537.
- Strauss, J. P., Barrick, M. R., & Connerley, M. L. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational & Organizational Psychology*, **74**, 637– 657.
- Tsui, A. S., Egan, T. D., & Porter, L. W. (1994). Performance implications of relational demography in vertical dyads. *Paper Presented at the Annual Meeting of the Academy of Management*, Dallas.
- Tsui, A. S., & Farh, J. L. (1997). Where guanxi matters: Relational demography and guanxi in the Chinese context. *Work and Occupations*, **24**, 56– 79.
- Tsui, A. S., & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in supervisor-subordinate dyads. *Academy of Management Journal*, **32**, 402– 423.
- Tucker, L. R., & Lewis, C. (1973). The reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, **38**, 1– 10.
- Turban, D. B., & Jones, A. P. (1988). Supervisor-subordinate similarity: Types, effects, and mechanisms. *Journal of Applied Psychology*, **73**, 228– 234.
- Vandenberghe, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of Vocational Behavior*, **64**, 47– 71.
- Vecchio, R. P., & Brazil, D. M. (2007). Leadership and sex-similarity: A comparison in a military setting. *Personnel Psychology*, **60**, 303– 335.
- Vogel, R. M., & Feldman, D. C. (2009). Integrating the levels of person-environment fit: The roles of vocational fit and group fit. *Journal of Vocational Behavior*, **75**, 68– 81.
- Wasti, S. A. (2002). Affective and continuance commitment to the organization: Test of an integrated model in the Turkish context. *International Journal of Intercultural Relations*, **26**, 525– 550.
- Wasti, S. A. (2003). The influence of cultural values on antecedents of organizational commitment: An individual-level analysis. *Applied Psychology: An International Review*, **52**, 533– 554.
- Wasti, S. A. (2008). Organizational commitment: Complication or clarification. In P. B. Smith, M. F. Peterson, & D. C. Thomas (Eds.), *The handbook of cross cultural management research* (pp. 95– 116). Thousand Oaks, CA: Sage Publications, Inc.
- Wasti, S. A., & Can, Ö. (2008). Affective and normative commitment to organization, supervisor, and coworkers: Do collectivist values matter? *Journal of Vocational Behavior*, **73**, 404– 413.

- Westerman, J. W., & Cyr, L. A. (2004). An integrative analysis of person-organization fit theories. *International Journal of Selection and Assessment*, **12**, 252– 261.
- Wexley, K. N., Alexander, R. A., Greenawalt, J. P., & Couch, M. A. (1980). Attitudinal congruence and similarity as related to interpersonal evaluations in manager-subordinate dyads. *Academy of Management Journal*, **23**, 320– 330.
- Xin, K., Farh, J. L., Cheng, B. S., & Tsui, A. S. (1999). Guanxi and vertical dyads: Evidence from Taiwan and the PRC. *Paper Presented at the Conference of the Asia Association of Social Psychology*, Taipei, Taiwan.
- Xin, K. R., & Pearce, J. L. (1996). Guanxi: Connections as substitutes for formal institutional support. *Academy of Management Journal*, **39**, 1641– 1658.
- Yang, K. S. (1992). Chinese social orientation: The view of social interaction. In K. S. Yang, & A. B. Yu (Eds.), *The Chinese psychology and behavior: Concept and method*. Taipei: Laureate.