The Investigation of the Relation between Person-organization Fit, Person-job Fit, Psychological Ownership, and Contextual Performance: A Longitudinal Approach

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According to prior research, psychological ownership may strengthen the relations between employers and employees and make employees produce extra-role and voluntary behaviors which foster organizational performance via the psychological contract that exists between employers and employees. Actually, person-organization fit and person-job fit contribute to psychological ownership, which may foster organizational performance. However, fewer studies discussed the relations between person-organization fit, person-job fit, and psychological ownership, representing an important research gap. A longitudinal approach which could attenuate the errors associated with common method variance that trouble most studies using simultaneous data was utilized to investigate constructs proposed by this study via valid data of 133 employees from Taiwan Bayer. Based on analytical results, person-job fit was significantly related to psychological ownership, and then psychological ownership was significantly related to contextual performance. However, person-organization fit was positively but not significantly related to psychological ownership. In a competitive environment, the findings of this study have important implications for both academics and practitioners.

Key Words: Person-organization Fit, Person-job Fit, Psychological Ownership, and Contextual Performance
INTRODUCTION

The concept of psychological ownership has become an important issue because the relationship between employees and an organization has been emphasized by many scholars. For example, person-organization fit (Morley, 2007), contextual performance (Borman and Motowidlo, 1993), organizational commitment (Meyer and Allen 1997), and psychological ownership (Pierce, Kostova, and Dirks, 2001) are all related to the connection between employees and an organization. However, few studies discussed the relations among person-organization fit, person-job fit, and psychological ownership and organizational performance, revealing an important research gap that needs further investigation.

Prior research demonstrated that the ownership of employees was positively related to organizational performance (Rosen and Quarrey, 1987; Wagner and Rosen 1985); however, few studies have investigated the relation between psychological ownership and organizational performance. As Pierce et al. (2001) noted, three roots - having a place, feelings of efficacy and effectance, and self-identity - may contribute to psychological ownership of employees. Employees with psychological ownership regard targets as their extension, defend the organization voluntarily, and feel responsible for organizational goals, and the result is enhancement of organizational performance. According to prior research, psychological ownership is an antecedent of organizational commitment (Van Dyne and Pierce, 2004), and altruistic spirit can be evoked by organizational commitment (Podsakoff, MacKenzie, Paine, and Bachrach, 2000) which is regarded as one of the major antecedents of organizational citizenship behaviors, within which altruism is one important element (LePine, Erez, and Johnson, 2002; Organ and Ryne, 1995). Therefore, psychological ownership is associated with organizational citizenship behaviors which contribute to organizational performance. As argued by Motowidlo and Van Scotter (1994), many elements of organizational citizenship behaviors such as helping and cooperating behaviors are captured by contextual performance; however, few studies discuss the relationship between psychological ownership and contextual performance, thus indicating that there still is considerable room for improvement.

As Masterson and Stamper (2003) argued, both person-organization fit and psychological ownership are constructs that may contribute to perceived organizational membership; therefore, person-organization fit and psychological ownership are correlated. Person-organization fit is regarded as the match between employees and organizational attributes (Kristof-Brown, 2000), that is, employees with person-organization fit may have personal values and traits that are similar to organizational attributes. Those employees who have person-organization fit may
have responsibility for protecting the organization and then producing the altruistic spirit which contributes to psychological ownership. Therefore, person-organization fit is positively related to psychological ownership; however, few studies investigate the relationship between person-organization fit and psychological ownership, representing an important research gap. Furthermore, person-job fit is regarded as the match between employees and requirements of jobs, that is, employees with person-job fit may have knowledge, skills, and abilities that match job demands (Kristof-Brown, 2000). Those employees who have person-job fit may invest their time and money in daily jobs which may satisfy their economic needs, social needs, psychological needs, and goal achievement, thus contributing to job satisfaction and organizational commitment. In fact, organizational commitment makes employees produce altruistic spirit that contributes to psychological ownership; therefore, employees with person-job fit may have altruistic spirit and then produce psychological ownership. However, few studies have investigated the relationship between person-job fit and psychological ownership, indicating an important research gap that needs to be filled.

To fill the research gaps mentioned above, this study proposes a research framework, focusing on the relationships between person-organization fit, person-job fit, psychological ownership, and organizational performance. To attenuate the errors associated with common method variance which often troubles most studies using simultaneous data, this study will collect data via different time stages and make the results more reliable. In a competitive environment, the findings of this study have important implications both for academics and for practitioners.

The Conceptions of Psychological Ownership

Psychological ownership is defined as an individual’s feelings toward a substantial or non-substantial target that then make individuals regard targets as “It’s Mine” (Pierce et al., 2001). That is, targets closely connected with individuals may make individuals feel targets as self-extensions (Belk, 1988; Dittmar, 1992; O’Driscoll, Pierce, and Coghlan, 2006). As for the relation between employees and an organization, effective ownership of employees may make employees feel themselves as the owner of an organization (Pierce, Rubenfeld, and Morgan, 1991; Pierce et al., 2001; Wagner, Parker, and Christiansen, 2003). This psychological feeling further lets employees produce a psychological contract that may strengthen the relation between employees and an organization and make employees be more willing to express extra-role behaviors contributing to organizational performance (Rousseau, 1989). Those employees who hope to become organizational insiders are willing to integrate with the organization voluntarily and keep the relation (Pierce et al. 1991; VandeWalle,
Van Dyne, and Kostova 1995). According to Meyer and Allen (1991), psychological ownership is related to organizational behaviors: this psychological feeling based on the identification that employees have toward their organization is reflected as the sense of belonging of employees who hope to become organizational insiders (O’Driscol et al. 2006).

Druskat and Pescosolido (2002) regarded psychological ownership as a concept that focused on sharing, that is, organizational members were all regarded as owners of the organization, and these feelings of authority and responsibility make individuals share beliefs and values which contribute to organizational benefits (Wagner et al. 2003). Consequently, psychological ownership, which is related to attitudes and behaviors of employees, is different from formal ownership (Van Dyne et al., 2004).

**Traits of Psychological Ownership**

Ownership which exists in tangible or intangible targets (Beaglehole, 1932; James, 1890) may refer to ownership out of legal possessions (Wilpert, 1991). According to Van Dyne et al. (2004), traits of psychological ownership include attitudes, self-concept, and sense of responsibility. First, those who have positive feelings toward tangible or intangible targets may produce positive attitudes toward these targets (Nuttin, 1987). Second, psychological ownership may make organizational members regard targets as their extensions (e.g., jobs) (Belk, 1988; Dittmar, 1992; Furby, 1978). Third, employees with psychological ownership may have a sense of responsibility toward targets, that is, psychological ownership makes employees more willing to defend targets (Hall 1966). As argued by Beaglehole (1932) and Furby (1978), psychological ownership may create responsibility that affects behaviors; namely, psychological ownership may strengthen the willingness of members to defend these tangible or intangible targets (Hall, 1966). When psychological ownership is linked with organizational members, employees will produce traits of psychological ownership, including positive attitudes, self-concept, and sense of responsibility.

**Roots of Psychological Ownership**

Pierce et al. (2001) argued that the three roots of psychological ownership include having a place or home, feelings of efficacy and effectance, and self-identity. Psychological ownership may satisfy the basic needs of employees, making employees more willing to devote themselves to familiar targets. The first root reveals that psychological ownership may satisfy employees’ sense of belonging, which makes employees have favorable and safe feelings toward the organization (Van Dyne
et al. 2004). Based on McMillan and Chavis (1986), sense of belonging is defined as the concept according to which the individuals themselves invest as organizational members, and then a sense of privilege is produced. Consequently, sense of belonging may make employees feel different from individuals of other groups. The differences, which include symbols and languages, help organizational members develop individual spaces that make them feel favorable and interact with other members closely (Ehrlich and Graeven 1971; Wood 1971). The close interaction which develops the feeling of group-acceptance may increase the willingness of individuals to sacrifice for the group (McMillan et al. 1986). Organizational members who invest themselves in their organization are more likely to produce a sense of belonging which makes assignments more meaningful and valuable (Masterson et al. 2003). Furthermore, the sense of belonging is considered as the base of organizational commitment (Meyer and Allen 1997), that is, an organization may cause employees produce higher organizational commitment via psychological ownership (Dittmar 1992; Furby 1978; Pierce et al. 2001; Van Dyne et al. 2004).

The second motivation of psychological ownership makes individuals feel they are effective in some related fields (Bandura 1977; White 1959). As argued by McMillan et al. (1986), individuals attracted by the group may have beliefs that they are effective in the group and then produce a sense of mattering (Peterson and Martens 1972; Solomon 1960; Zander and Cohen 1955), which is demonstrated via the interaction of the environments (Backman and Secord 1959; Thibaut and Kelley 1959), making employees produce a sense that they are effective and emphasized by the organization (McMillan et al. 1986). The influential power supported by the organization makes employees feel they are important and valuable, namely, organizational procedures and policies are affected by employees (Masterson et al. 2003). Furthermore, self-identity is the sense that individuals identify themselves (Pierce et al. 2001) and understand their characteristics such as personal traits and values (Dittmar 1992; Porteous 1976; Van Dyne et al. 2004). Those employees who are satisfied by these basic needs may produce behaviors which contribute to the organization. Therefore, employees with psychological ownership are more willing to devote themselves to the organization and bear the responsibility to protect the organization from criticisms (Brown 1989; Bernstein 1979). Employees who have psychological ownership toward the organization are more willing to participate in the jobs (Rochberg-Halton 1980; Van Dyne et al. 2004).

**Psychological Ownership and Possession**

Prior research demonstrated that the ownership of employees was positively related to organizational performance (Rosen et al., 1987; Wagner et al., 1985);
however, there still exists considerable room for improvement in the relation between psychological ownership and organizational performance. In fact, organizational performance is affected by owners and employees and both parties usually have different goals (Eisenhardt, 1989). The differences of goals between the two parties (i.e., employers and employees) can be coordinated via psychological ownership (Duncan 2001). The situation of the employees regarded as the owners of the organization may be considered as the conception that integrates benefits between employees and organizations (Jenson and Meckling 1976). It shows that the relationship between employees and the organization changes and affects employees’ thoughts and behaviors (Druskat et al., 2002; Duncan 2001; Vande Walle et al., 1995). For example, employees who hold stocks expect to participate in organizational decision-making (Hammer, Landau, and Stern, 1981; Hammer and Stern, 1980) so as to get high economic reciprocation (French, 1987). Two important factors that let employees experience psychological ownership of the organization include control of the organization and motivation of investment (Eisman, 1989); therefore, employees may produce psychological ownership via participating in management and controlling the organization. Pierce et al. (2001) argued that employees had psychological ownership toward the organization because of control of the organization, extensive knowledge of the organization, and the opportunities to invest themselves. Thus, psychological ownership is defined as the collective conception that organizational members who are regarded as the owners may have authority and responsibility that contribute to organizational benefits (Druskat et al., 2002). Norms and beliefs of employees are formed to maximize organizational benefits via ownership (Long, 1978). Thus, employees who hold stocks believe that reciprocation derives from organizational performance and want to devote to the organization. Prior research demonstrated that employees with psychological ownership were willing to accept privilege and reciprocation which might include responsibility and risks (Duncan 2001; Pierce et al. 2001) Consequently, employees who hold stocks tend to express behaviors of improving organizational performance, reducing organizational cost, and exploring innovative methods of enhancing benefits (Druskat and Pescosolido, 2002; Duncan, 2001; Long, 1978; Pierce et al., 1991). Furthermore, Heinen and Bancroft (2000) argued that performance ownership culture is based on seven pillars: financial ownership, meaningful work, business information, employee involvement, leadership, performance feedback, and career management. Employees can be encouraged to bear the responsibility of organizational performance.

**Person-organization Fit**

Person-organization fit is associated with recruiters and applicants. Applicants
may find a suitable organization based on person-organization fit (Cable and Judge, 1997; Saks and Ashforth, 1997), and recruiters may find suitable employees via a sense of fit (Cable et al., 1997; Kristof-Brown, 2000). Person-organization fit may affect employees’ intention of turnover (Cable and Judge, 1996) and therefore become the strategy utilized by the organization. In fact, fit is closely linked to decisional factors that help the organization predict decisions of employees (Cable et al., 1997; Kristof-Brown, 1996; Cable and DeRue, 2002). Kristof-Brown (1996) argued that person-organization fit refers to the compatibility between employees and the organization (e.g., contexts and jobs) (Chatman, 1989; Judge and Bretz, 1992). The core conception refers to the fit of personal value between employees and an organization (Chatman, 1989; Judge and Bretz, 1992), and person-organization fit is linked to organizational commitment, job satisfaction, and turnover intention (O’Reilly, Chatman, and Caldwell, 1991; Ambrose, Arnaud, and Schminke, 2008). Consequently, job-seekers look for jobs with characteristics consistent with their personality (Schneider, 2001), and an organization tends to recruit employees with personality consistent with organizational values (Morley, 2007).

As Saks et al. (1997) noted, employees who are consistent with organizational values may be closely linked to the organization. Employees who identify themselves as organizational members may produce organizational identity (Turner, 1984). Person-organization fit is related to perceived organizational support, that is, these beliefs may make employees understand the extent to which the organization cares about them (Eisenberger, Huntington, Hutchinson, and Sowa, 1986). According to prior research, person-organization fit is associated with extra-role behaviors (Chatman, 1989; Lauver and Kristof-Brown, 2001; Cable et al., 2002) and the intention of turnover (Schneider, 1987; Cable et al., 1996; Lauver et al., 2001; Cable et al., 2002). Therefore, an organization may select employees via the evaluation of person-organization fit such as the evaluation of personal traits, values, and demands of applicants (Bowen, Chatman, and Caldwell, 1991). Employees who feel their values are consistent with organizational values may produce positive behaviors such as organizational citizenship behaviors which contribute to organizational performance. Person-organization fit is associated with job satisfaction, organizational commitment (Kristof-Brown, Zimmerman, and Johnson, 2005), turnover intention, and contextual performance (Ambrose et al., 2008). Therefore, person-organization fit improves the relationship between employees and an organization, and the similarity of personal values and goals may enhance employees’ trust and understanding toward an organization (Sekiguchi, 2007). Furthermore, an organization may recruit employees who have similar values via selection, affect personal values of employees
via socialization (e.g., orientation, on-job training), and then make their personal values transform into long-existing beliefs (Chatman, 1991). The same values (e.g., honest, helping behaviors, sharing knowledge, etc.) that exist between employees and an organization may contribute to employees’ positive attitudes and behaviors such as high involvement, organizational commitment, and job satisfaction (Judge et al., 1992). Therefore, the fit between personal traits and organizational values contributes to organizational identification and performance.

**Person-job Fit**

Person-job fit refers to the congruence between personal traits of employees and characteristics of tasks and jobs (Edwards, 1991; Kristof-Brown, 1996). That is, the ability, knowledge, and technology of employees may contribute to the performance of employees. Two concepts of person-job fit are proposed by Edwards (1991). First, demands-abilities fit refers to knowledge, technology, and ability of employees that are consistent with demands of jobs. Second, needs-supplies fit or supplies-values fit refers to demands of employees (i.e., compensation, welfare, and education training) that can be acquired from jobs; it represents that employees who are motivated to have a job want to acquire rewards provided by the organization (Simon, 1951). The employees perceive, according to their personal values, that their needs are consistent with rewards such as challenging jobs, opportunities for promotion, appreciation, and good working conditions (Cable et al., 2002). Prior research demonstrated that person-job fit was related to job satisfaction (Locke, 1969; Porter, 1961 and 1962; Kristof-Brown et al., 2005), which showed that employees or organizations all had demands they expected to be satisfied. Those employees who think that their abilities are insufficient for the job demands may feel nervousness and pressure, which cause intention of turnover. Relatively, when the employee requirements can be satisfied on the job, there is an impact on employee job satisfaction (Edwards, 1996).

In fact, person-job fit, knowledge, skills, and abilities are regarded as the main standard of selection, because person-job fit is positively related with personal performance. As demonstrated by prior research, person-job fit is positively associated with job satisfaction, employee performance, and organizational commitment and is negatively associated with intention of turnover (Kristof-Brown et al., 2005; Ambrose et al., 2008). As for organizational benefits, recruiters are used to utilizing job analyses to select employees who have acquired knowledge, skills, and abilities and then produce in-role behaviors (Morley, 2007) contributing to organizational functions. As for job satisfaction, employees who have person-job fit are more willing to invest their time and money in jobs which may satisfy their economic needs, social needs, and psychological needs; that is, goal achievement
contributes to their job satisfaction (Judge, Cable, Boudreau, and Bretz, 1995) and therefore person-job fit may predict job satisfaction. Employees with person-job fit may produce organizational commitment and be willing to conduct affairs associated with their organization (Meyer, Allen and Smith, 1993). Furthermore, self-esteem is also an important factor (Ashforth and Mael, 1989) causing intention of turnover; namely, employees with exceptional competence may not be satisfied with jobs and then produce low organizational commitment. Consequently, employees with person-job fit may express good performance and get rewards from the organization (Cable et al., 2002).

**Contextual Performance**

Contextual performance is regarded as the conception that employees perform their jobs well (e.g., cooperate with colleagues, voluntarily help others, and take the initiative to solve job-related problems), so as to achieve organizational goals, thus enhancing competitive advantage. As Campbell (1990) argued, employees who perform well conform to three key points which include employees’ self-control, behaviors related to organizational goals, and behaviors measured via the degree that employees contribute to the organization. As defined by Murphy and Jackson (1999), employee performance is related to employees’ behaviors which can be controlled, observed, and measured. Therefore, managers of human resource management can reward or train employees via their controllable behaviors and not via uncontrollable behaviors (Campbell, Gasser, and Oswald, 1996). Furthermore, three categories of job behaviors include employee participation, in-role performance, and innovative and spontaneous behaviors which are defined as extra-role behaviors (Katz and Kohn, 1978). Eight dimensions of employee performance proposed by (Campbell, 1990) include job-specific task proficiency, non-job specific task proficiency, written and oral communication task proficiency, demonstration of effort, maintenance of personal discipline, facilitation of peer and team performance, leadership, and administration. In fact, employee performance is related to social, psychological, and contextual environments that may contribute to organizational missions. Employee behaviors, such as undertaking informal assignment, working hard to complete tasks, helping and cooperating with others, and following organizational rules and procedures, may contribute to organizational performance (Borman et al., 1993). As for improvement of interpersonal relationships and job investment, improvement of interpersonal relationships refers to being enthusiastic in helping others so as to improve morale, encourage cooperation, get rid of obstacles, and help colleagues to finish their affiliated task in such behaviors while job investment refers to following regulations, working hard, solving problems actively, and even defending
organizational benefits (Motowidlo and Van Scotter, 1994). Both improvement of interpersonal relationships and job investment contribute to contextual performance.

**Person-organization Fit and Psychological Ownership**

Psychological ownership makes employees feel the owners of the organization (Pierce et al., 1991; Pierce et al., 2001; Wagner et al., 2003). Employees with psychological ownership hope to become organizational insiders and then retain keep the relationship (Vande Walle et al., 1995; O’Driscoll, Pierce, and Coghlan, 2006). The first root of psychological ownership, a sense of belonging, makes employees sense the organization as a place that makes them feel comfortable, favorable, and safe (Van Dyne et al., 2004). Person-organization fit contributes to sense of belonging and then enhances psychological ownership, which makes employees feel the organization is as comfortable as home. Thus, employees with psychological ownership may consider themselves as the organizational insiders, devote themselves to finish the job via extra-role behaviors, and be willing to be responsible for protecting the organization (Van Dyne et al., 2004). As for psychological contract, reciprocal and exchangeable relationships exist between an organization and employees when employees have a psychological contract toward an organization; these relationships are related to their compensation, promotion, training, development, etc. (Rousseau, 1990). That is, a psychological contract lets employees perceive some obligations which are not specifically showed in contracts stemming from human resource practices such as recruitment, compensation, training, etc. (Rousseau, 1995). Employees who are satisfied via these practices may think they are insiders (Masterson et al., 2003) and form intangible contracts which inspire employees to defend the organization. On the basis of the above review, this study argues that person-organization fit may satisfy the root of psychological ownership (i.e., sense of belonging) that may form a psychological contract contributing to psychological ownership. Therefore, the following hypothesis is proposed.

*Hypothesis 1:* Person-organization fit is positively related to psychological ownership.

**Person-job Fit and Psychological Ownership**

Person-job fit is related to psychological ownership, that is, employees who favor their jobs may regard jobs as self-extensions, be willing to spend more time and money, and feel responsible for protecting their jobs against criticisms of others (Van Dyne et al. 2004). Positive evaluation toward possessions may be produced via psychological ownership; therefore, employees who feel they can affect and control jobs may produce high job satisfaction and job performance via active participation.
According to Pierce et al. (2001), one root of psychological ownership is the feeling of efficacy and effectance that makes employees have effective interactions in working environments (Bandura, 1977; White, 1959) and strengthen the feeling of controlling targets (Van Dyne et al., 2004). Therefore, person-job fit makes employees have good interaction with the organization and feel they have exceptional competence to do jobs well, resulting in psychological ownership. Individuals who are attracted by the organization may produce beliefs (McMillan et al., 1986), and these beliefs make employees feel they are important to organizations and produce the feeling that they matter (Peterson et al., 1972; Solomon, 1960; Zander and Cohen, 1955). That is, the beliefs that make employees feel they are emphasized by the organization may be demonstrated and understood by the interaction with environments (McMillan and Chavis, 1986). Communications conducted between employees and organizations let employees feel they are valuable; organizations allow employees to participate in decision making and affect organizational procedures and policies to infuse the feeling of mattering (Masterson et al., 2003). Person-job fit focuses on the conception that needs, expectations, and desires of employees may be satisfied via jobs; in other words, jobs that include tangible and intangible rewards must satisfy the employee needs. When employees seek to be organizational members, need of fulfillment is the key factor. Organizations that satisfy different demands of employees, such as economic and development demands may cause employees to feel that the organizations may ensure their rights, including economic benefits, social status, and training opportunities (Graham, 1991). Not only rights (e.g., participation) but also obligations (e.g., mission) may be perceived by employees when employees feel they belong to the organization (Graham 1991; Masterson et al., 2003). Therefore, person-job fit positively affects psychological ownership and hypothesis 2 is proposed.

Hypothesis 2: Person-job fit is positively related to psychological ownership.

Psychological Ownership and Contextual Performance

Psychological ownership is positively related to organizational commitment; therefore, employees who have psychological ownership may produce organizational commitment via affective attachment and thus employees with higher organizational commitment may work harder to reciprocate organizations (Vande Walle et al., 1995). Organizational commitment refers to the conception that employees are willing to accept and identify organizational goals and values (Mowday, Steers, and Portor, 1979) and then produce loyalty and obligation (Kanter, 1968), which result in high
organizational benefit (Mowday et al., 1982). Therefore, psychological ownership may make employees strive for organizational goals and then enhance performance via organizational commitment. Pierce et al. (2001) argued that employees who produced psychological ownership voluntarily might hope to be organizational members by maintaining the relationship (Vande Walle et al., 1995; O’Driscoll et al., 2006). That is, employees with psychological ownership may produce extra-role behaviors which contribute to organizational citizenship behaviors (Rousseau, 1989). Employees who perceive organizational support may be encouraged to produce helping behaviors to reciprocate organizations (Blau, 1986). According to social exchange theory, people who accept favors will reciprocate helpers actively (Gouldner, 1960), that is, the social exchange relationship creates the sense of reciprocation via the formation of culture and norms (Cropanzano and Mitchell, 2005). Based on Organ and Konovsky (1989), employees who feel the organization may reward or benefit them are willing to express organizational citizenship behaviors and form responsibility for defending the organization. Therefore, the organization creating environments benefiting employees can make employees produce reciprocal behaviors which contribute to organizational performance (Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades, 2001; Henry and Peelle III, 2007). As demonstrated by practical and theoretical research, organizational citizenship behaviors are related to improvement of organizational performance (Podsakoff and MacKenzie, 1997), and psychological ownership is positively associated with organizational citizenship behaviors (Van Dyne et al., 2004); therefore, employee performance may be enhanced by psychological ownership through organizational citizenship behaviors. When employees feel psychological ownership toward the organization, they will feel their jobs are meaningful and important and then participate in organizational activities actively (Rochberg-Halton, 1980; Van Dyne et al., 2004). Psychological ownership plays an important role in enhancing organizational competitiveness because those who have psychological ownership may have confidence and feel responsible for defending the organization (Brown 1989; Bernstein, 1979). As for contextual performance, employees who are willing to conduct organizational affairs actively via extra-role behaviors may contribute to organizational performance, and psychological ownership is the key factor that contributes to employees’ extra-role behaviors. Therefore, hypothesis 3 is proposed.

**Hypothesis 3:** Psychological ownership is positively related to contextual performance.

According to above reviews, our research framework is presented in Figure 1.
Sample and Procedures

This study proposed to explore the relationships among person-organization fit, person-job fit, psychological ownership, and contextual performance via a longitudinal approach; data collection from one enterprise was suitable for us to keep the data consistent. Taiwan Bayer, the branch of a German corporation, was chosen in this study to investigate the relationship between employees’ cognition and employee performance. To attenuate the problem of common method variance caused by simultaneous or same source data, this study designed two types of questionnaires including supervisors and employees to collect data from different sources (Podsakoff and Organ, 1986). Questionnaires for supervisors were utilized to investigate employee performance via opinions of supervisors, and questionnaires for employees were utilized to investigate their cognitions of person-organization fit, person-job fit, and psychological ownership. Three stages of questionnaires were conducted in this study via email. Questionnaires were sent to supervisors and employees through email and were returned to researchers directly after they were filled out. To attenuate participants’ doubts and enhance participants’ willingness, this study guaranteed that questionnaires would never be disclosed to others but would only be utilized in academic research. In the first stage, 330 questionnaires were sent to employees, and 168 valid questionnaires were returned, representing a response rate of 51%. In the second stage, 168 questionnaires were sent to the employees who participated in the first-stage survey, and 134 valid questionnaires were returned, a response rate of 80%. In the third stage, 134 questionnaires were sent to employees who participated in the two-stage survey, and 88 valid questionnaires were returned, a response rate of 66%.
Measures

**Person-organization Fit** A two-item scale adopted from Cable et al. (2002) was applied to capture employees’ person-organization fit. Measurement items included, “My viewpoints are similar to viewpoints of my organization,” and “My personal values are similar to values and culture of my organization.” A five-point Likert scale was used to assess these items (1 = strongly disagree, 5 = strongly agree). The Cronbach’s alpha for this scale was .72.

**Person-job Fit** A three-item scale adopted from Cable et al. (2002) was applied to capture employees’ person-job fit. Measurement items included, “What my job offers is consistent with things which I hope to get,” “The present job can realize the things which I want to pursue,” and “The skills that I have may match requirements of my job.” A five-point Likert scale was used to assess these items (1 = strongly disagree, 5 = strongly agree). The Cronbach’s alpha for this scale was .78.

**Psychological Ownership** A four-item scale adopted from Pierce et al. (2001) and Van Dyne et al. (2004) was applied to capture employees’ psychological ownership. Measurement items included, “I sense this organization is our company,” “I feel closely involved in the success or failure of the company,” “I am willing to share pains and pleasures with my organization,” and “I am willing to treat my company as my home.” A five-point Likert scale was used to assess these items (1 = strongly disagree, 5 = strongly agree). The Cronbach’s alpha for this scale was .74.

**Contextual Performance** A three-item scale modified from Motowidlo et al. (1994) was applied to capture employees’ employee performance. Measurement items included, “This employee often takes the initiative to solve a work problem,” “This employee often volunteers for additional duty,” and “This employee often offers to help others accomplish their work.” A five-point Likert scale was used to assess these items (1 = strongly disagree, 5 = strongly agree). The Cronbach’s alpha for this scale was .85.

**RESULTS**

**Discriminant and Convergent Validity**

Furthermore, this study utilized the matrix phi to understand the extent to which a construct is truly distinct from other constructs. Based on the perspectives of Jöreskog and Sörbom (1981), they proposed that two conceptually similar concepts
were distinct if \( \text{PHI} + 1.96 \times \text{standardized error} \) excluded 1. Results in Table 1 showed that the discriminant validity existed among constructs. Additionally, convergent validity indicates the degree to which measures of the same concept are correlated. According to standardized \( \lambda \) and T value showed in Table 2, each T value of latent variables reached the significant level, thus indicating every construct had convergent validity.

### Table 1 Standardized \( \lambda \) and T

<table>
<thead>
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<th>Factor</th>
<th>indicator</th>
<th>Standardized ( \lambda )</th>
<th>Standardized T</th>
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<tr>
<td></td>
<td>X2</td>
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<tr>
<td>Person-job fit</td>
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<td></td>
<td>X4</td>
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<td></td>
<td>X5</td>
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<tr>
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<td>Y2</td>
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### Table 2 PHI and SE

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<th>Person-job fit</th>
<th>Psychological ownership</th>
<th>Contextual performance</th>
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<td></td>
<td>(0.18)(^{b})</td>
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</tr>
<tr>
<td>Person-job fit</td>
<td>0.19(^{**})</td>
<td>0.28(^{**})</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological ownership</td>
<td>-0.02</td>
<td>0.13(^{*})</td>
<td>0.64(^{**})</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.08)</td>
<td>(0.32)</td>
<td></td>
</tr>
<tr>
<td>Contextual performance</td>
<td>0.21(^{*})</td>
<td>0.28(^{***})</td>
<td>0.22(^{*})</td>
<td>0.91(^{***})</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.10)</td>
<td>(0.12)</td>
<td>(0.05)</td>
</tr>
</tbody>
</table>

\(^{a}\) PHI, \(^{b}\) Standardized Error

* \( P<0.1 \), ** \( P<0.05 \), *** \( P<0.01 \)
Means, Standard Deviations, and Correlations

Table 3 lists the means, standard deviations, and correlations. The means from high to low are contextual performance, person-job fit, person-organization fit, and psychological ownership. The relationships of three variables are inter-correlated positively and significantly ($r = .172 - .435$, all $p < .1$); however, the relationship between person-organization fit and employee performance was not significant. The results indicated that these inter-relationships require further exploration.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>S. D.</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Person-organization fit</td>
<td>3.552</td>
<td>0.587</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Person-job fit</td>
<td>3.602</td>
<td>0.594</td>
<td>0.267**</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Psychological ownership</td>
<td>3.393</td>
<td>0.517</td>
<td>0.172*</td>
<td>0.435***</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>4. Contextual performance</td>
<td>3.814</td>
<td>0.782</td>
<td>-0.033</td>
<td>0.274**</td>
<td>0.335***</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* $P < 0.1$, ** $P < 0.05$, *** $P < 0.01$

Figure 2 Structure Model
Structural Model

This study used the structural equation model to test the hypotheses. Overall, the structural model provided an adequate fit to the data ($X^2$/D.F. =1.07, GFI=0.90, AGFI=0.83, RMSR=0.067, CFI=0.99, IFI=0.99). As shown in Figure 2, the relationship between person-organization fit and psychological ownership was positive but not significant ($\beta = .16, p > .1$), indicating that Hypothesis 1 was not supported. Person-job fit was positively associated with psychological ownership ($\beta = .52, p < .01$), thereby supporting Hypothesis 2. The path coefficient for the relationship between psychological ownership and contextual performance was positive and significant ($\beta = .44, p < .01$), thereby supporting Hypothesis 3.

DISCUSSION

Based on results, person-job fit positively affects psychological ownership, which contributes to employee performance, which indicates that person-job fit may help employees produce psychological ownership and then enhance employee performance. However, the relationship between person-organization fit and psychological ownership is positive but not significant. Compared to person-job fit, person-organization fit cannot significantly contribute to psychological ownership, indicating that this organization needs to transform personal values of employees. According to prior research, phenomena that contribute to psychological ownership include sense of belonging, efficacy, and self-identity (Pierce et al., 2001); however, few studies investigate organizational mechanisms that induce psychological ownership of employees. We argue that person-organization fit and person-job fit are important factors that may awaken employees’ psychological ownership and then foster employee performance. However, person-job fit is more significant than person-organization fit. In fact, psychological ownership of employees is derived from formal ownership (e.g., stocks and employee participation) or emotions that employees identify organizational goals and actions (Pierce et al., 2001). The fact that few studies investigate relationships among person-organization fit, person-job fit, and psychological ownership reveals an important contribution of this study. Furthermore, compared to antecedents of employee performance (e.g., organizational commitment and organizational citizenship behaviors) discussed by prior researches (VandeWalle, 1995; Van Dyne et al., 2004), this study further investigated cognitive factors that contributed to psychological ownership and then fostered employee performance.
Implications

Some important implications are discussed as follows. First, an organization can look for employees with person-organization fit or organization-job fit who may have a positive response toward their job or organization and feel that their contribution is recognized. In fact, human resources (HR) practices are regarded as approaches that may improve employees’ cognition toward the organization and then influence psychological ownership and employee performance. That is, an organization may utilize practices of person-organization fit and person-job fit (e.g., selection and training) to inspire psychological ownership of employees that produce altruistic behaviors to achieve organizational goals. Second, how to enhance employees’ psychological ownership toward the organization will be the key point of strategic human resource management in the future. The implication of psychological ownership in human resource management was discussed by this study. That is, psychological ownership makes employees feel tightly connected with the organization and enhances their loyalty and faith. When employees have psychological satisfaction, the relationship between employees and employers may be improved; therefore, the key point of HR practices is to enhance psychological ownership of employees. Employees with psychological ownership may regard their job-related efforts as part of self-extension, be more willing to connect with the organization voluntarily, and keep a relationship of high remuneration and high performance.

Contribution

A new research framework was proposed by this study to demonstrate that person-job fit and person-organization fit may make employees produce psychological ownership that contributes to employee performance. The result that person-job fit significantly contributes to psychological ownership shows that person-job fit plays an important role in the process of recruitment. Psychological ownership plays an important role in the relation between employees and employers, because the psychological perception makes employees display positive attitudes and behaviors that contribute to the organization and stabilize the relation between employees and employers. Furthermore, three-stage questionnaires were utilized to collect data to reduce the bias caused by common method variance. That is, objective approaches were adapted to investigate the antecedent and consequence of psychological ownership which contributed to human resource management and strategic management.
Limitations and Future Study

To conduct longitudinal analyses, this study only collected data from Taiwan Bayer Corporation; however, since characteristics of one corporation are different from characteristics of others, the generalizability may be limited. We suggest that future studies collect data from different corporations or industries so that they can be generalized. In addition, the content of contextual performance adopted by this study is a general representation of contextual performance, not a comprehensive representation. Future studies can investigate a relatively broader perspective of contextual performance. According to prior research, few studies discussed the mediators that make employees produce psychological ownership, and thus future studies may explore the phenomenon that employees with person-organization fit produce psychological ownership via sense of belonging and employees with person-job fit may produce psychological ownership via feelings of efficacy. Therefore, the aforementioned relationships may be discussed by future studies.

Nowadays, employee performance is regarded as an organizational task that may respond to the dynamic environment (Podsakoff et al. 1997). The nature of employee performance is different because activities, vision, and strategy of different organizations are different. (Motowidlo et al. 1999); therefore, the organization may ask employees to be more adaptive, so as to confront dynamic environments (Pulakos et al. 2002). In other words, dynamic environments make the organization look for employees adaptive to dynamic environments. Because standards that measure employees who are adaptive to environments are different from original standards, new contents extended from contextual performance focus on environmental adaptation and become a key index of evaluation (Schmitt, Cortina, Ingerick, and Wiechmann 2003). Thus, the relationship between psychological ownership and adaptive performance of employees should be investigated by future studies. Furthermore, job position and tenure are associated with person-organization fit, person-job fit, and psychological ownership. Generally, employees who are senior or have a high position may experience high fitness and psychological ownership because of long-term integration of organizational values and personal values. Therefore, tenure and position may be regarded as control variables in future studies.
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