# Psychological ownership and feelings of possession: three field studies predicting employee attitudes and organizational citizenship behavior

# LINN VAN DYNE<sup>1</sup>\* AND JON L. PIERCE<sup>2</sup>

<sup>1</sup>Eli Broad Graduate School of Management, Michigan State University, East Lansing, Michigan, U.S.A. <sup>2</sup>Labovitz School of Business and Economics, University of Minnesota Duluth, Duluth, Minnesota, U.S.A.

Summary An increasing number of scholars and practitioners have emphasized the importance of 'feelings of ownership' for the organization (even when employees are not legal owners). In this exploratory study, we examine the relationships of psychological ownership with work attitudes and work behaviors. We start by developing hypotheses based on the psychology of possession and psychological ownership literatures. We then test these hypotheses with data from three field samples, using responses from over 800 employees, as well as manager and peer observations of employee behavior. Results demonstrate positive links between psychological ownership for the organization and employee attitudes (organizational commitment, job satisfaction, organization-based self-esteem), and work behavior (performance and organizational citizenship). More important, psychological ownership increased explained variance in organization-based self-esteem and organizational citizenship behavior (both peer and supervisor observations of citizenship), over and above the effects of job satisfaction and organizational commitment. Contrary to prior theoretical work on psychological ownership, results, however, fail to show an incremental value of psychological ownership in predicting employee performance. Copyright © 2004 John Wiley & Sons, Ltd.

# Introduction

The idea of psychological ownership for the organization (i.e., the possessive feeling that some object is 'MINE' or 'OURS') has received increasing attention from scholars and practitioners as a potentially important predictor of employee attitudes and behaviors (Brown, 1989; Dirks, Cummings, & Pierce, 1996; Peters, 1988; Pierce, Rubenfeld, & Morgan, 1991; Pierce, Kostova, & Dirks, 2001; VandeWalle, Van Dyne, & Kostova, 1995). Psychological ownership is the psychologically experienced phenomenon in which an employee develops possessive feelings for the target.

An extensive amount of research in a wide variety of fields (child development, geography, philosophy, gerontology, psychology, law, and consumer behavior) emphasizes the importance of

<sup>\*</sup>Correspondence to: Linn Van Dyne, Eli Broad Graduate School of Management, Michigan State University, N424 North Business Complex, East Lansing, MI 48824, U.S.A. E-mail: vandyne@msu.edu

possessions and ownership in influencing human attitudes, motivation, and behavior. For example, scholars have addressed legal and psychological perspectives on ownership (cf. Etzioni, 1991; James 1890/1950/1963) and links to self-identity, self-adjustment, and well-being (cf. Kasser & Ryan, 1993) as well as ownership of tangible (e.g., home, toys) and intangible (e.g., ideas) objects (Isaacs, 1933; Rochberg-Halton, 1980). In the management literature, scholars (cf. Rousseau & Shperling, 2003; Tannenbaum, 1983) have addressed the role of formal organizational ownership arrangements (e.g., cooperatives and employee stock ownership plans), as well as the role of psychological ownership (Dirks et al., 1996; Pendleton, Wilson, & Wright, 1998; Pierce et al., 1991, 2001).

In this paper, we suggest that the possessive nature of psychological ownership for the organization differentiates it from other work-related attitudes while simultaneously (and more importantly) allowing psychological ownership for the organization to increase our understanding of employee attitudes and behavior, by explaining variance over and above existing constructs (such as commitment and satisfaction). In other words, even though psychological ownership should be related to other work-related attitudes, it has a fundamentally different conceptual base (possession) and, accordingly, should differ in its explanatory power. We develop this idea later in the paper by drawing on the literature on possessions (Belk, 1988; Rudmin, 1991) and the psychology of possession (Furby, 1978, 1991; James, 1890/1950/1963) to argue and then empirically demonstrate the value-added nature of psychological ownership for the organization.

To date, we are aware of only three published empirical studies that have examined psychological ownership. VandeWalle et al. (1995) examined psychological ownership of housing cooperative residents and showed relationships of psychological ownership with commitment and satisfaction to the cooperative and self-perceptions of extra-role behavior. Pendleton et al.'s (1998) study of four U.K. bus companies showed feelings of ownership were related to satisfaction, involvement, integration, commitment, and self-perceived changes in attitudes and work-related behaviors. Finally, Parker, Wall, and Jackson's work on quality management (1997) showed production ownership was linked to concerns for unfinished work.

Our research differs from these prior studies because we emphasize possession as the unique core of psychological ownership for the organization. We also include observer perceptions of performance and organizational citizenship to avoid self-presentation biases, and we examine its incremental contribution in explaining employee behavior, over and above that of the two most commonly researched employee attitudes: organizational commitment and job satisfaction.

Building on the psychological ownership theoretical framework introduced by Pierce et al. (2001), we examined the relationships between psychological ownership for the organization and employee work attitudes (organizational commitment, job satisfaction, and self-concept) and two employee work behaviors (performance and organizational citizenship). We start with a brief summary of the psychology of possession literature (e.g., Furby, 1978), discuss psychological ownership for the organization, and develop hypotheses based on the psychology of ownership and property literatures (Pierce et al., 2001). We test our predictions with three field samples and conclude by discussing both theoretical and practical implications of our work.

# The Psychology of Possession

A sense of possession (feeling as though an object, entity, or idea is 'MINE' or 'OURS') is the core of psychological ownership (Furby, 1978). Possessive feelings are ubiquitous, can refer to tangible or intangible objects (Beaglehole, 1932; James, 1890), and can occur based on legal ownership or in

the absence of legal ownership (Wilpert, 1991). Scholars in a wide variety of fields note the close connection between possessions, feelings of possession, and feelings of ownership. For example, Etzioni (1991) described ownership as a 'dual creation, part attitude, part object, part in the mind, part "real"" (p. 466). James (1890/1950/1963) noted that 'a man's Self is the sum total of all that he CAN call his, not only his body and his psychic powers, but his wife and children, his ancestors and friends, his reputation' (pp. 291–292). In sum, people tend to equate feelings of possession with feelings of ownership (Dittmar, 1992; Furby, 1978). In the next three paragraphs, we draw more specifically on the psychology of possession research to discuss links with attitudes, self-concept, and sense of responsibility.

### Attitudes

The psychology of possession literature demonstrates that people feel positively about tangible and intangible targets of ownership. For example, Beggan (1992) proposed the idea of 'mere ownership effects' based on empirical analysis of reactions to perceptions of ownership. Results of this study showed that people evaluated ideas and objects more favorably when they felt a sense of ownership for the target. In other words, feelings of psychological ownership lead to positive attitudes about the entity (Nuttin, 1987).

### Self-concept

The psychology of possession also proposes that feelings of ownership cause people to view tangible and intangible possessions as part of the extended self (Belk, 1988; Dittmar, 1992; Furby, 1978). For example, James (1890) linked 'mine' and 'me': 'We feel and act about certain things that are ours very much as we feel and act about ourselves' (p. 291). Sartre (1943/1969) observed that 'the totality of my possessions reflects the totality of my being ... I am what I have ... What is mine is myself' (pp. 591– 592). Thus, tangible and intangible possessions and feelings of psychological ownership become linked to the self-concept (Furby, 1978).

### Sense of responsibility

According to Beaglehole (1932) and Furby (1978), possessions and feelings of ownership trigger a sense of responsibility for the entity. For example, Hall (1966) argued that possession causes individuals to protect and defend their ownership rights. The property rights literature also emphasizes protecting and enhancing possessions (Wilpert, 1991). This includes improvements and controlling or limiting access by others.

In sum, theory and research on the psychology of possession link feelings of ownership with positive attitudes about the target of ownership, the self-concept, and sense of responsibility for the target. In the next section, we draw on these fundamental processes to further define and specify the construct of psychological ownership.

# **Psychological Ownership for the Organization**

Psychological ownership is the psychologically experienced phenomenon in which an employee develops possessive feelings for the target. Building on Furby (1978) and Dittmar (1992), Pierce

and colleagues (2001) linked feelings of possession with feelings of ownership and defined psychological ownership as the state in which an individual feels that an object (i.e., material or immaterial) is experienced possessively (i.e., it's 'MINE' or it is 'OURS').<sup>1</sup>

Pierce, Kostova, and Dirks (2001, 2003) described psychological ownership as an attitude with both affective and cognitive elements. They illustrate this with the following commonly used phrases that denote feelings of ownership or possession. For example, 'She is MY daughter,' or 'That is OUR house!' include both affective and cognitive information based on affective judgments and more abstract beliefs. This is consistent with basic psychological research on attitudes (Breckler & Wiggins, 1989) and with Weiss and Cropanzano's (1996) Affective Events Theory that differentiates beliefs about the job from emotional experiences at work. Affective and cognitive elements. Extending this idea and applying it to psychological ownership, we propose that psychological ownership is different from other work-related attitudes and has unique explanatory power because its conceptual core is feelings of possession that trigger affect-driven behaviors. In other words, psychological ownership consists, in part, of an emotional attachment to the organization that transcends the mere cognitive evaluation of the firm.

This tight connection between possession and feelings of ownership can be directed at the organization (or workplace) as a whole or at specific aspects of the organization such as the group, job, work tools (i.e., a computer or production machine), or work itself. Different targets of ownership can vary in salience, depending on the individual and the situation. For example, some employees have psychological ownership for their work and others might have ownership feelings for the overall organization. In this investigation, we focus on the organization as the target of feelings of ownership (psychological ownership for the organization).

### Conceptual distinctiveness of psychological ownership

Pierce et al. (2001) theorized that psychological ownership can be differentiated from other constructs based on its conceptual core (possessiveness) and motivational bases. They argued that psychological ownership satisfies three basic human needs: 'home' (having a sense of place), efficacy and effectance, and self-identity. When employees experience psychological ownership, they are able to satisfy these basic needs.

The first need (to have a 'place' or home) is the basic need to have a sense of belonging. Ardrey (1966), Duncan (1981), and Porteous (1976) argued that possessions such as those captured symbolically by 'home' provide individuals with a sense of place. According to philosopher Simone Weil (1952), having a place is an important 'need of the human soul' (p. 41) because the soul 'feels isolated, lost, if it is not surrounded by objects which seem to it like an extension of the bodily members' (p. 33). Porteous (1976) argued that home is not only a plot of land and four walls, but it can also be a village, compound, or neighborhood. Home, or a sense that this space is mine, provides a context for comfort, pleasure, and security (Heidegger, 1967).

<sup>&</sup>lt;sup>1</sup>From a Western, individualistic cultural tradition, the word 'our' suggests two simultaneous relationships. First, it implies that the object of possession has a connection with the self (me/my). Second, it also signals that the possessive relationship is shared with other individuals (us/our). For example, the phrase 'she is OUR daughter' indicates she is 'MY' daughter as well as my spouse's daughter. Thus, 'OUR' indicates a collective target of possession. This same connotation applies in organizational settings when groups of employees acquire a sense of psychological ownership for the organization. We acknowledge cultural differences in the use and meaning of possessive terms such as 'my' and 'our'. For example, although some cultures tend to use 'my' and 'our' interchangeably when referring to collective entities, other cultures do not recognize individual ownership.

Feeling efficacious is a general human need to feel capable in specific areas (Bandura, 1977). Effectance motivation is the need to feel capable of interacting effectively in a setting (White, 1959). For example, having a red sports car helps some people feel powerful. Others gain a sense of capability by feeling they cause things to happen. Thus, possessions facilitate feelings of control and influence over both tangible and intangible items (Pierce, O'Driscoll, & Coghlan, in press).

Self-identity is the final need identified by Pierce et al. (2001). It is the need to have a clear sense of self (Burke & Reitzes, 1991). Possessions and a sense of 'mine' help people know the self. 'Possessions are repositories of memories of one's self-identity in the past' (Cram & Paton, 1993, p. 19). Possessions are also symbolic expressions of the self that show core values or individuality (Abelson & Prentice, 1989; Dittmar, 1992; Porteous, 1976).

Differentiating psychological ownership for the organization conceptually from other work-related attitudes (e.g., organizational commitment, organizational identification, internalization, psychological empowerment, job involvement, and job satisfaction) is important to avoid construct proliferation (Morrow, 1983). The focus or 'question' answered by each of these relationship constructs is different. Psychological ownership for the organization asks 'How much do I feel this organization (workplace) is mine?' Organizational commitment asks 'Why should I maintain my membership in this organization?' (i.e., because I want to, because I need to, or because I ought to?) (Meyer & Allen, 1997). Organizational identification asks 'Who am I?' (Dutton, Dukerich, & Harquail, 1994; Mael & Tetrick, 1992; Pratt, 1998). Internalization asks 'What do I believe?' (O'Reilly & Chatman, 1986). Psychological empowerment asks 'Do I feel capable and intrinsically motivated in my work role?' (Spreitzer, 1995). Job involvement asks 'How important is the job and job performance to my self-image?' (Lawler & Hall, 1970). Finally, job satisfaction asks 'What evaluative judgments do I make about my job?' (Weiss & Cropanzano, 1996).

Feeling a sense of ownership for the organization (feeling possessiveness and feeling that the organization is 'MINE' or 'OURS') is fundamentally different from feeling the desire, need, or obligation to remain in an organization (organizational commitment: Meyer & Allen, 1997). It is different from using a distinctive and admired characteristic of the organization to define the self (organizational identification: Mael & Tetrick, 1992). It is different from association based on goal congruence (internalization: O'Reilly & Chatman, 1986). Psychological ownership for the organization is different from feeling capable and intrinsically motivated at work (psychological empowerment: Spreitzer, 1996). It differs from being consumed by work and having the job as a central life interest (job involvement: Lawler & Hall, 1970). Finally, the possessive feeling that some object is 'MINE' or 'OURS' differentiates psychological ownership from positive or negative evaluative judgments of the job or job situation (job satisfaction: Weiss & Cropanzano, 1996).

In the next section, we address the relationship of psychological ownership for the organization with employee attitudes and behaviors. Here we build on the above arguments that psychological ownership is distinct from other constructs and develop the logic for our hypotheses.

# **Psychological Ownership and Employee Attitudes and Behaviors**

The psychology of possession identifies three fundamental outcomes associated with feelings of possession: positive attitudes toward the target, enhanced self-concept, and a sense of responsibility (Furby, 1978, 1991). In work organizations, we suggest that this sense of possession (which allows individuals to satisfy their basic needs for place, efficacy and effectance, and self-identity) is key to work-related attitudes (commitment and satisfaction), self-concept (organizational-based self-esteem), and behaviors (performance and organizational citizenship).

#### Work-related attitudes

Organizational commitment is the psychological attachment individuals feel for the organization (O'Reilly & Chatman, 1986). Organizational commitment asks 'Should I maintain my membership in this organization and why?' Those with strong commitment want to continue their organizational affiliation. Affective commitment is the strength of emotional attachment to the organization (based on positive attraction and a sense of belonging) (Meyer & Allen, 1997).

As argued earlier, the psychology of possession shows that possessions give people a sense of place, belonging, and personal space (Porteous, 1976). Thus, possessions and feelings of ownership satisfy the basic human need for place. According to Beggan (1992) and the 'mere ownership effect,' people generally become more attached to things they feel they possess than similar things that they do not feel they possess. Since feeling a sense of attachment and belonging are the essence of organizational commitment, it seems reasonable to predict a positive relationship between psychological ownership for the organization and organizational commitment. In other words, feeling possessive toward the organization (psychological ownership) should lead to high levels of organizational commitment. Through a sense of possession for the organization, employees view it as a place in which to dwell ('home')—a place that provides a psychic comfort and security (Dittmar, 1992; Furby, 1978; Pierce et al., 2001). Accordingly,

#### Hypothesis 1a: Psychological ownership will be positively related to organizational commitment.

Extending our logic for links between psychological ownership for the organization and commitment, we also propose that feelings of ownership for the organization have implications for other work-related attitudes, such as satisfaction. General satisfaction is a positive or negative evaluative judgment of the overall job situation, and job satisfaction is the more proximal positive or negative evaluative judgment of the job (Weiss & Cropanzano, 1996). Job satisfaction asks 'How do I evaluate my job?' We propose that feelings of possession for the organization (psychological ownership) enhance general satisfaction and provide the context (or environment) in which job satisfaction is embedded (Kozlowski & Klein, 2000). When evaluative judgments about the organization and organizational experiences are positive, this provides an overall framework that should influence evaluative judgments of job satisfaction.

The theory of psychological ownership argues that a sense of possession directed toward the organization satisfies three basic human motives (efficacy and effectance, self-identity, and having a place or home) and produces positive evaluative judgments (Pierce et al., 2003). This is consistent with the possession research that demonstrates that people develop favorable evaluations of their possessions (Beggan, 1992) and judge owned objects more favorably than similar, un-owned objects (Nuttin, 1987). Thus, when organizational members feel possessive toward the organization (they have influence and control at work, intimate knowledge about the organization, and feel they have invested themselves in their organizational roles), they should have high levels of general satisfaction, which in turn should influence job satisfaction. In contrast, if these needs are not met (low psychological ownership), both general and more specific evaluative judgments should be negative. In sum, we propose a positive relationship between feelings of possession directed at the organization (psychological ownership for the organization) and positive evaluative judgments directed at the job (job satisfaction).

Hypothesis 1b: Psychological ownership will be positively related to job satisfaction.

Furby's second major theme from the psychology of possession is enhanced self-concept. As described above, feelings of possession are linked to the self (Belk, 1988; Dittmar, 1992) and only a fine line separates 'mine' from 'me' (James, 1890/1950/1963). In organizations, an important

self-construct is organization-based self-esteem (Pierce, Gardner, Cummings, & Dunham, 1989). Organization-based self-esteem is an employee's self-concept as a member of the work organization. This is a special sense of self that emerges from organizational experiences (Jex & Elacqua, 1999; Pierce et al., 1989; Tang & Peng, 1997) and reflects employee evaluations of personal adequacy and self-worth within the organizational context.

When employees develop a sense of ownership for the organization, the psychology of possession suggests that these feelings of ownership become an extension of self-concept (Furby, 1978). Possessions can symbolize the self and show core values (Abelson & Prentice, 1989; Dittmar, 1992; Porteous, 1976). Psychologically experienced possessions (both tangible and intangible) thus become positive expressions of the self and serve basic human needs for self-identity and self-enhancement (Dipboye, 1977; Korman, 2001). Thus, we hypothesized that when employees feel the organization is their personal psychological property, they will also have positive self-assessments of themselves as members of the organization.

*Hypothesis 2a*: Psychological ownership will be positively related to employee self-esteem within the organizational context (i.e., organization-based self-esteem).

We also propose that to make a meaningful contribution to the literature, psychological ownership for the organization must improve our ability to predict over and above other work-related attitudes such as commitment and satisfaction (Morrow, 1983). To date, research has demonstrated that commitment and satisfaction are related to organization-based self-esteem (cf. Gardner & Pierce, 1998; Ragins, Cotton, & Miller, 2000). Thus, emphasizing the unique emphasis of psychological ownership on possessions and sense of possession (Pierce et al., 2001), we propose psychological ownership for the organization will improve predictions of organization-based self-esteem beyond commitment and satisfaction.

*Hypothesis 2b*: Psychological ownership will increase explained variance in organization-based self-esteem, over and above the effects of organizational commitment and job satisfaction.

#### Work behaviors

The third theme highlighted in the psychology of possession literature is sense of responsibility. Beaglehole (1932) and Furby (1978) argue that feelings of possession create a sense of responsibility that influences behavior. When individuals have possessive feelings, they proactively enhance, control, and protect both tangible and intangible targets of ownership (Hall, 1966). When employees feel a sense of psychological ownership or possession toward the organization, work acquires existential significance (Wilpert, 1991) that triggers active participation (Dirks et al., 1996; Rochberg-Halton, 1980). Drawing on the close link between feelings of ownership and active involvement, we focus on performance and citizenship.

As noted above, Pierce et al. (2001) theorized that psychological ownership addresses three basic human needs: having a sense of place, efficacy and effectance, and self-identity. We propose that when these basic needs are fulfilled in an organizational context employees will be proactive in protecting and enhancing the target of their feelings of ownership. Thus, employees should be proactive in making behavioral contributions to the organization. When organizations provide employees with a valued sense of belonging (place), sense of efficacy and effectance, and sense of self-identity, they will be motivated to reciprocate (Gouldner, 1960). In other words, psychological ownership for the organization.

This psychology of 'mine' should lead to conscientious role behaviors and high levels of job performance.<sup>2</sup> Thus, we hypothesized:

Hypothesis 3a: Psychological ownership will be positively related to employee performance.

We return to our earlier point that psychological ownership for the organization must go beyond existing research. To date, prior research has demonstrated that commitment and satisfaction can be related to work performance (Judge, Thoresen, Bono, & Patton, 2001; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Thus, psychological ownership must make a unique contribution to performance beyond that accounted for by commitment and satisfaction. Since possession (the core of psychological ownership) is fundamentally different from feeling attached (committed) or having positive evaluations (satisfied), we propose that the sense of responsibility triggered by feelings of psychological ownership for the organization will increase explained variance in employee job performance beyond that provided by these two work-related attitudes. Accordingly,

*Hypothesis 3b*: Psychological ownership will increase explained variance in employee performance, over and above the effects of commitment and job satisfaction.

Our second work behavior is organizational citizenship (discretionary work behaviors that contribute to organizational well-being, but are not part of formal job expectations) (Organ, 1988). Prior research demonstrates that organizational citizenship is related to organizational commitment and job satisfaction (LePine, Erez, & Johnson, 2002). Here we extend this research and propose that feelings of ownership and possession should be especially relevant to non-prescribed behavior (such as OCB) because organizations cannot sanction lack of citizenship and employees choose to contribute OCB based on personal experiences. When employees find their needs for belonging, efficacy and effectance, and self-identity are met based on a sense of possession or psychological ownership for the organization (Pierce et al., 2001) this triggers a sense of responsibility.

Feelings of 'mine' cause proactive behavior aimed at protecting and enhancing the target of ownership (Beaglehole, 1932; Wilpert, 1991). In addition, when employees feel that the organization contributes to their basic needs, they reciprocate by making positive, proactive contributions to the organization. For example, Pierce et al. (1991, 2001) and Van Dyne et al. (1995) proposed that psychological ownership would be related to extra-role behaviors. These volitional behaviors include helping co-workers, volunteering for special tasks, and orienting new employees. In sum, we propose that a sense of possessiveness causes discretionary actions intended to benefit the organization. In addition, consistent with the unique role of possession, we propose that psychological ownership for the organization will add explanatory power beyond organizational commitment and job satisfaction. Thus,

Hypothesis 4a: Psychological ownership will be positively related to organizational citizenship.

*Hypothesis 4b*: Psychological ownership will increase explained variance in organizational citizenship behavior, over and above the effects of commitment and job satisfaction.

In summary, we have hypothesized that, based on feelings of possession, psychological ownership for the organization will be related to commitment, satisfaction, organization-based self-esteem, performance, and organizational citizenship behavior. We also proposed that psychological ownership will account for variance that is unaccounted for by commitment and satisfaction.

<sup>&</sup>lt;sup>2</sup>While we posit a positive relationship between psychological ownership and performance, we acknowledge that this relationship is unlikely to be direct. Instead, as with most attitude–behavior relationships (e.g., commitment–performance), motivation and other psychological processes most likely mediate the connection.

# **Organizational Context**

### **Multiple Settings**

We tested our model with data from three field samples in order to increase the generalizability of our findings and to represent a broad range of regional, firm, job, and respondent characteristics. All data were collected from employees working in the United States. Accordingly, although some samples may have included participants with different cultural backgrounds, the majority of respondents were U.S. citizens and represent the diversity of the national culture in the United States.

### **Multiple Firms**

The first two studies were conducted in specific organizations and thus relationships that we report may have been influenced by the location of each firm within the country (midwest and southeast). The third sample addresses this possibility because it sampled a broad range of employees from a wide range of organizations from throughout the country.

### **Multiple Types and Levels of Jobs**

Overall, respondents represent employees holding clerical, office, supervisory, professional, and management jobs, further increasing the applicability of our results. In Sample 1, participants were exempt employees (managers, professionals, and supervisors) from the top four levels in the organizational hierarchy. In Sample 2, participants were exempt and non-exempt employees (managers, professionals, supervisors, clerical, and office staff). In Sample 3, participants were exempt professionals who held jobs such as accountant, auditor, purchasing agent, mechanical engineer, and software engineer.

### **Multiple Respondents**

In Studies 1 and 2, we obtained data from employees. In Study 3, we expanded our design and included data from employees, their supervisors, and their work group peers.

### **Employees**

Each sample represents a different proportion of males and females (Sample 1: 87 per cent male; Sample 2: 57 per cent male; Sample 3: 39 per cent male). In Sample 3, typical participants had college degrees, were 34 years in age, and had worked for their current employers for 7 years.

### **Supervisors**

In Sample 3, we obtained matched data from the employee's supervisors for 68 per cent of the respondents.

### **Work Group Peers**

In Sample 3, we obtained matched data from the employee's work group peers for 76 per cent of the respondents.

### **Generalizability of Results**

In sum, our use of multiple settings, multiple firms, multiple types and levels of jobs, and multiple respondents increases our confidence in the applicability of our findings to a wide range of firms, jobs, and employees in the United States. We recommend that future research examine psychological ownership in other cultural settings.

## Method

To increase generalizability of our research and to replicate our analyses of psychological ownership, we conducted three convenience sample field studies including clerical, office, supervisory, professional, and management jobs from different areas of the United States. We tested hypotheses separately in each sample. Sample 1 is 186 managers, professionals, and supervisors from the top four hierarchical levels of a MidWestern electrical utility (88 per cent response rate; 87 per cent male). In Sample 2, 409 employees from a variety of functional units representing all but the top two levels of the hierarchy in a southeast diversified services organization completed questionnaires (90 per cent response rate; 57 per cent male). Sample 3 is 227 professional employees (accountant, auditor, purchasing agent, mechanical engineer, and software engineer; 61 per cent female) from a wide range of organizations from throughout the country who provided data and contact information for their supervisors and peers as part of a professional development seminar. On average, participants had a college degree, were 34 years old, and had 7 years organizational tenure. We obtained matched data from two peers for 173 of these employees (76 per cent response rate) and from supervisors for 154 employees (68 per cent response rate). Three months later, we obtained test–retest data on psychological ownership for 184 of the original 227 employees (81 per cent).

### Measurement of psychological ownership for the organization

Although this field study focuses on substantive issues pertaining to psychological ownership for the organization, the study is exploratory because there is limited previous research that measures this psychological state and we are aware of no empirical work on the construct validation of psychological ownership for the organization. As a consequence, we include initial construct validation evidence as a precursor to our examination of the hypothesized relationships.

Consistent with our earlier discussion of the core meaning of *psychological ownership* for the organization, we emphasized *possession* as the basis of our attitudinal measure of psychological ownership and used possessive vocabulary such as reflected in everyday associations with property and possessions—'That idea was MINE,' 'This is MY office,' 'She is OUR daughter!'—for our items (cf. Furby, 1978, 1991; Litwinski, 1942, 1947; Pierce et al., 2001).

We had five judges (organizational behavior faculty) assess content validity of our measure (see Table 1). None identified any items as outside the theoretical domain (no contamination) and none proposed additional items to cover omitted aspects of the domain (no deficiency). A second, non-overlapping panel of three judges (undergraduate management majors) independently sorted randomly ordered items that assessed psychological ownership for the organization, commitment (Porter, Steers, Mowday, & Boulian, 1974), affective commitment (Meyer & Allen, 1991), organizational identification and internalization (O'Reilly & Chatman, 1986), job satisfaction (Smith, 1976), and job involvement (Lawler & Hall, 1970). Judgments for the initial seven psychological ownership items were 90 per cent accurate (19 of the 21 ratings provided by the three judges).

We examined the homogeneity and dimensionality of the ownership items with CFA (LISREL 8), using maximum likelihood estimation and listwise deletion (Anderson & Gerbing, 1988). In Sample 1 (n = 186), a one-factor model of the initial seven-item psychological ownership scale produced a significant chi-square ( $\chi^2 = 31.56$ , 14 d.f., p < 0.05, RMSEA = 0.09, CFI = 0.97). Completely standardized factor loadings ranged from 0.68 to 0.91 and all *t*-values were significant (10.18–15.67). Modification indices indicated the model could be improved by dropping the last three items. This improved the chi-square statistic such that it failed to reach significance ( $\chi^2 = 5.29$ , 2 d.f., p > 0.05),

#### Table 1. Psychological ownership items

#### **Psychological ownership**

*Instructions*: Think about the home, boat or cabin that you own or co-own with someone, and the experiences and feelings associated with the statement 'THIS IS MY (OUR) HOUSE!' The following questions deal with the '**sense of ownership**' that you feel for the organization that you work for. Indicate the degree to which you personally *agree* or *disagree* with the following statements.

Item

1. This is MY organization.

2. I sense that this organization is OUR company.

3. I feel a very high degree of personal ownership for this organization.

4. I sense that this is MY company.

- 5. This is OUR company.
- 6. Most of the people that work for this organization feel as though they own the company.

7. It is hard for me to think about this organization as MINE. (reversed)

with factor loadings 0.71–0.87 and *t*-values 10.64–13.97. In Sample 2 (n = 409), CFA of the revised measure again showed a non-significant chi-square ( $\chi^2 = 3.69$ , 2 d.f., p > 0.05, RMSEA = 0.05, CFI = 0.99), with factor loadings 0.76–0.91 and *t*-values 17.44–22.65. The chi-square was also non-significant in Sample 3 ( $\chi^2 = 3.74$ , 2 d.f., p > 0.05, RMSEA = 0.06, CFI = 0.99, n = 227), with factor loadings 0.73–0.93 and *t*-values 11.32–17.99. Overall these results support homogeneity and unidimensionality of the psychological ownership measure.

Cronbach's coefficient alpha showed acceptable internal consistency reliability (0.87, 0.90, and 0.93) in each of the samples. In Sample 3, we also assessed test–retest reliability with 3-month lagged data. As expected for measurement of an attitude, stability was moderate (r = 0.72, p < 0.001), with T1 mean = 4.70 (SD = 1.58) and T2 = 4.73 (SD = 1.48); T2  $\alpha = 0.89$ .

#### Other measures

In Sample 1, we measured *organizational commitment* with six items (e.g., I am proud to tell others that I am a part of this organization; I really care about the fate of this organization) (Porter et al., 1974; 1 = strongly disagree, 5 = strongly agree;  $\alpha = 0.88$ ). In Samples 2 ( $\alpha = 0.82$ ) and 3 ( $\alpha = 0.86$ ), we measured *affective commitment* with four items (e.g., I would be happy to spend the rest of my career in this organization; I enjoy discussing my organization with people outside it; Meyer & Allen, 1991; 1 = strongly disagree, 7 = strongly agree). In Samples 1 and 2, we assessed general *job satisfaction* with two items (e.g., satisfaction with supervision and good organization to work for;  $\alpha = 0.77$  and 0.77) (Smith, 1976; 1 = strongly disagree, 5 = strongly agree). In Sample 3, we measured job satisfaction ( $\alpha = 0.81$ ) with four items (e.g., satisfaction with supervision and overall quality of work life (Kunin, 1955).

In all three samples, we assessed *organization-based self-esteem* with five items (e.g., I COUNT around here; I make a DIFFERENCE around here; Pierce et al., 1989; 1 = strongly disagree, 5 = strongly agree;  $\alpha = 0.86$ , 0.85, 0.91). In Sample 3, supervisors rated employee *performance* with five items from Van Dyne and LePine (1998) (e.g., quantity and quality of work, relationships with others, initiative, and reliability ( $1 = \text{very much does not meet performance expectations}, 7 = \text{very much exceeds performance expectations}; <math>\alpha = 0.92$ ). Supervisors ( $\alpha = 0.93$ ) and peers ( $\alpha = 0.93$ ) also assessed *organizational citizenship behavior* with five items (e.g., volunteers to do things for this work group, helps orient new employees, attends functions that help the group; 1 = strongly disagree, 7 = strongly agree from Van Dyne and LePine's (1998) helping organizational citizenship scale.

We collected demographic information in Sample 3 because maturity, gender, and tenure can influence performance at work (Van Dyne & LePine, 1998). Employees reported age (years), gender (1 = male; 2 = female), education (six ordered categories), and organizational tenure (months).

We assessed distinctiveness of psychological ownership for the organization relative to other constructs using exploratory and confirmatory factor analysis. In Sample 1, factor analyses of the 17 items with principal component analyses (varimax rotation; scree plot; eigenvalues >1.0) indicated four factors (68 per cent of the variance). All items loaded on expected factors (54–0.89, with highest cross loading = 0.43 versus primary loading = 0.68). In Sample 2, factor analysis of the 15 items produced four factors (73.3 per cent of the variance; loadings = 0.63–0.90, with highest cross-loading = 0.39 versus primary loading = 0.63). In Sample 3, the 32 items produced a seven-factor solution (73 per cent of the variance; loadings = 0.55–0.91, with highest cross-loading = 0.39 versus primary loading = 0.70).

To further assess these relationships, we used LISREL to conduct nested model confirmatory factor analysis. In Sample 1, loadings for all items (n = 17) were significant, and nested comparisons showed significant improvement in model fit for each successive comparison: two-factor model was better than one-factor model ( $\Delta \chi^2 = 138.27$ , 1 d.f.), three-factor better than two ( $\Delta \chi^2 = 88.60$ , 2 d.f.), and four better than three ( $\Delta \chi^2 = 273.55$ , 3 d.f.). Since each of these exceeds the critical value based on degrees of freedom, results demonstrate the superiority of the hypothesized four-factor model. Nested model comparisons in Sample 2 were similar, showing successively better fit for models with more factors, ending with four factors better than three factors ( $\Delta \chi^2 = 603.85$ , 3 d.f.). In Sample 3, nested model comparisons again showed that models with more factors produced better fit to the data (e.g., seven factors versus six factors ( $\Delta \chi^2 = 702.16$ , 6 d.f.). In sum, these analyses differentiate psychological ownership for the organization from commitment, satisfaction, organization-based self-esteem, performance, and supervisor-rated and peer-rated OCB.

We tested hypotheses with hierarchical regression. We used Change-*F* statistics to assess each regression step and *t*-values to interpret individual parameters.

### Results

Results support Hypothesis 1a. In each sample, the correlation between psychological ownership for the organization and commitment (see Table 2) was significant (r = 0.68, p < 0.001; r = 0.70, p < 0.001; r = 0.40, p < 0.001). In Sample 3, regression results (see Table 3) show that after accounting for the demographic controls (age, education, gender, and organizational tenure) psychological ownership for the organization increased explained variance in commitment by 15 per cent ( $\Delta F = 30.59$ , p < 0.001). Results in all three samples support Hypothesis 1b, showing a positive relationship between psychological ownership for the organization and job satisfaction (r = 0.48, p < 0.001; r = 0.28, p < 0.001; r = 0.42, p < 0.001). In addition, in Sample 3 (see Table 3), psychological ownership for the organization increased explained variance in satisfaction by 16 per cent ( $\Delta F = 33.81$ , p < 0.001), beyond the controls. Hypothesis 2a was supported with a positive relationship between psychological ownership for the organization and organization-based self-esteem (r = 0.46, p < 0.001; r = 0.57, p < 0.001; r = 0.45, p < 0.001). Results also support Hypothesis 2b (see Table 4). Psychological ownership for the organization increased explained variance in organizational-based self-esteem by 6 per cent ( $\Delta F = 14.25$ , p < 0.001,  $\Delta F = 35.48$ , p < 0.001,  $\Delta F = 15.37$ , p < 0.001), showing psychological ownership for the organization has a unique relationship with organizationbased self-esteem not accounted for by commitment or satisfaction.

Table 2. Descriptive statistics and correlations	s and c	orrelati	ions											
	Mean	SD	1	2	3	4	5	9	7	8	6	10	11	12
Sample I 1. Psychological ownership 5.14 2. Organizational 3.94	5.14 3.94	$1.12 \\ 0.61$	$0.87^{a}$ $0.68^{***}$	0.88										
<ul><li>communent</li><li>3. Job satisfaction</li><li>4. Organization-based</li><li>self-esteem</li></ul>	3.86 3.91	0.91 0.58	$0.48 * * \\ 0.46 * * *$	$0.52^{***}$ $0.34^{***}$	0.77 $0.43^{***}$	0.86								
Sample 2 1. Psychological ownership 4.38 2. Organizational 4.52	4.38 4.52	$1.42 \\ 1.25$	0.90 0.70***	0.82										
commutment 3. Job satisfaction 4. Organization-based self-esteem	3.76 3.77	$     1.18 \\     0.76 $	0.28*** 0.57***	$0.30^{***}$ $0.57^{***}$	0.77 $0.26^{***}$	0.85								
<i>Sample 3</i> 1. Psychological ownership <sup>b</sup> 4.70 2. Organizational 4.79	<sup>o</sup> 4.70 4.79	$1.58 \\ 1.34$	$0.93^{\circ}$ $0.40^{***}$	0.86										
commitment 3. Job satisfaction 4. Organization-based	4.93 5.59	$1.24 \\ 1.07$	$0.42^{***}$ $0.45^{***}$	0.50*** 0.45***	$0.81 \\ 0.43^{***}$	0.91								
5. Performance 6. Citizenship	5.19 5.16	$1.21 \\ 1.22$	$0.15^{*}$ $0.26^{***}$	$0.29^{***}$ $0.23^{***}$	$0.31^{***}$ $0.25^{***}$	$0.25^{***}$ $0.27^{***}$	$0.92$ $0.67^{***}$	0.93						
(supervisor-tated) 7. Citizenship (peer-rated) 8. Age 9. Education 10. Gender <sup>d</sup> 11. Tenure 12. Psvchological	5.32 34.02 3.66 1.61 80.14 4.73	$\begin{array}{c} 0.91 \\ 8.73 \\ 0.94 \\ 0.49 \\ 83.43 \\ 1.48 \end{array}$	0.30*** 0.03 0.07 0.06 0.06 0.00	$\begin{array}{c} 0.24 *** \\ 0.08 \\ -0.03 \\ 0.05 \\ 0.11 \\ 0.45 *** \end{array}$	0.19** -0.09 0.06 0.01 -0.07 0.31***	0.28*** 0.00 0.13* -0.14* -0.08 0.57***	$\begin{array}{c} 0.23 * * * \\ -0.04 \\ -0.02 \\ 0.04 \\ -0.03 & * * \end{array}$	0.34** -0.11 0.06 -0.01 -0.01 0.32***	$\begin{array}{c} 0.93\\ -0.09\\ 0.06\\ 0.06\\ 0.01\\ -0.07\\ 0.31***\end{array}$		- 0.07 0.19** -0.08 0.61*** -0.16** 0.08 0.08	-0.02 -0.03	- 0.01	0.89
ownership T2 where: * $p < 0.05$ ; ** $p < 0.01$ ; *** $p < 0.001$ *Cronbach's alpha on diagonal. Variables 1-12 (Time 1). Cronbach's alpha on diagonal. <sup>d</sup> 1 = Male, 2-Female.	p < 0.0	001.												

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	Organizationa	l commitment	Job sat	isfaction
	Step 1	Step 2	Step 1	Step 2
Predictor				
Age	0.05	0.02	-0.01	-0.04
Education	0.01	-0.02	0.04	0.01
Gender <sup>a</sup>	0.03	0.00	-0.01	-0.04
Organizational tenure	0.10	0.11	0.15	0.16t
Psychological ownership		0.39***		0.41***
$\Delta R^2$	0.02	0.15	0.02	0.16
$R^2$	0.02	0.17	0.02	0.18
$\Delta F$	0.78	30.59***	0.81	33.81***
F	0.78	6.86***	0.81	7.54***

Table 3. Regression results for commitment and satisfaction in Sample 3

*Notes*: p < 0.05; p < 0.01; p < 0.01; p < 0.001.

<sup>a</sup>Coding: 1, male; 2, female.

Table 4. Regression results for organization-based self-esteem in Samples 1-3

	Self-esteen	n Sample 1	Self-esteer	n Sample 2	Self-	esteem Samp	le 3
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 3
Predictor							
Age	_			_	0.09	0.08	0.06
Education	_				0.18**	0.17*	0.15**
Gender <sup>a</sup>					-0.15*	$-0.16^{**}$	-0.18**
Organizational tenure	_				0.10	-0.17*	-0.15t
Org. commitment	0.18*	-0.02	0.54***	0.06		0.34***	0.27***
Job satisfaction	0.33***	0.28***	0.09	0.38***		0.28***	0.20**
Psychological ownership		0.39***		0.33***			0.27***
$\Delta R^2$	0.21	0.06	0.32	0.06	0.07	0.27	0.06
$\Delta R^2 R^2$	0.21	0.27	0.32	0.38	0.07	0.34	0.40
$\Delta F$	23.62***	14.25***	94.53***	35.48***	3.31**	34.96***	15.37***
F	23.62***	6.86***	94.53***	80.45***	3.31**	14.74***	15.92***

*Notes*: \**p* < 0.05; \*\**p* < 0.01; \*\*\**p* < 0.001.

<sup>a</sup>Coding: 1, male; 2, female.

Hypothesis 3 predicted a positive relationship between psychological ownership for the organization and performance. Although the correlation in Table 2 is significant (r = 0.15, p < 0.05), regression results in Table 5 show that the beta for psychological ownership failed to reach significance ( $\Delta F = 3.45$ , p < 0.10), after accounting for demographic controls. Similarly, psychological ownership for the organization did not increase explained variance in performance (see Table 6, step 3) beyond commitment and satisfaction ( $\Delta F = 0.02$ , p > 0.05). Thus, results fail to support Hypothesis 3. Results support Hypotheses 4a and 4b, demonstrating a positive relationship between psychological ownership for the organization and organizational citizenship. We report two sets of results here because Sample 3 includes supervisor and peer observations. Table 5 shows that psychological ownership added 7–9 per cent to explained variance in citizenship beyond demographics ( $\Delta F = 11.45$ , p < 0.001;  $\Delta F = 16.48$ , p < 0.001). In addition, psychological ownership for the organization continued to increase explained variance in supervisor- and peer-rated OCB (3–4 per cent), over and above the effects of commitment and satisfaction (in addition to demographics) (see Table 6:  $\Delta F = 4.50$ , p < 0.05;  $\Delta F = 8.27$ , p < 0.01). In sum, psychological ownership for the organization provides

	Perfor	mance	1	rvisor-rated tizenship	Peer-rated citizenship		
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	
Predictor							
Age	-0.12	-0.14	-0.15	$-0.18^{t}$	-0.05	-0.07	
Education	0.00	0.00	0.05	0.05	0.07	0.04	
Gender <sup>a</sup>	0.02	0.01	-0.04	-0.06	-0.01	-0.03	
Organizational tenure	0.10	0.11	0.03	0.05	-0.06	-0.05	
Psychological ownership	р	$0.15^{t} (0.06)$		0.27***		0.30***	
$\Delta R^2$	0.01	0.02	0.02	0.07	0.02	0.09	
$\overline{R^2}$	0.01	0.03	0.02	0.09	0.02	0.10	
$\Delta F$	0.43	$3.45^{t}(0.06)$	0.81	11.45***	0.67	16.48***	
F	0.43	1.04	0.81	2.99**	0.67	3.88**	

Table 5. Regression results for performance and OCB, controlling for demographic characteristics (Sample 3)

*Notes*:  ${}^{t}p < 0.10$ ;  ${}^{*}p < 0.05$ ;  ${}^{**}p < 0.01$ ;  ${}^{***}p < 0.001$ .

<sup>a</sup>Coding: 1, male; 2, female.

Table 6. Regression results for performance and OCB, controlling for demographics, commitment, and satisfaction (Sample 3)

	F	Performance	e	Super	visor-rated C	OCB	Р	eer-rated OC	В
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Predictor									
Age	-0.12	-0.14	-0.14	-0.15	-0.16t	-0.18t	-0.05	-0.05	-0.07
Education	0.00	0.00	0.00	0.05	0.06	0.05	0.07	0.06	0.05
Gender <sup>a</sup>	0.02	0.01	0.00	-0.04	-0.06	-0.07	-0.01	-0.03	-0.03
Organizational	0.10	0.04	0.05	0.03	-0.01	0.02	-0.06	-0.09	-0.07
tenure									
Commitment		0.18*	0.18t		0.19*	0.14		0.18*	0.12
Satisfaction		0.20*	0.20*		0.14	0.08		0.11	0.04
Psychological			0.01			0.19*			0.24**
ownership									
$\Delta R^2$	0.01	0.10*	0.00	0.02	0.07	0.03	0.02	0.06	0.04
$R^2$	0.01	0.11	0.11	0.02	0.09	0.12	0.02	0.08	0.12
$\Delta F$	0.43	8.24***	0.02	0.81	5.83***	4.50*	0.67	5.38**	8.27**
F	0.43	3.06**	2.61**	0.81	2.52*	2.85**	0.67	2.26*	3.21**

Notes:  ${}^{t}p < 0.10$ ;  ${}^{*}p < 0.05$ ;  ${}^{**}p < 0.01$ ;  ${}^{***}p < 0.001$ .

<sup>a</sup>Coding: 1, male; 2, female.

incremental explanatory power in understanding organizational citizenship (beyond age, education, gender, tenure, commitment, and satisfaction).

# Discussion

The primary objective in this study was to increase our understanding of psychological ownership for the organization by testing predicted relationships between feelings of ownership and employee

attitudes/behaviors. Results demonstrate that psychological ownership for the organization increased explained variance in organizational citizenship behavior (for both supervisor and peer assessments of citizenship), over and above demographic characteristics, organizational commitment, and job satisfaction (Hypothesis 4). Results also demonstrate, as predicted, that psychological ownership was related to organizational commitment and to job satisfaction (Hypothesis 1). Finally, results show that psychological ownership added significantly to the prediction of organization-based self-esteem, over and above the effects of organizational commitment and job satisfaction (Hypothesis 2). Overall these findings are important because they show that psychological ownership for the organization increases our ability to predict and understand employee attitudes and behavior at work, over and above the two most commonly researched concepts that describe the employee–organizational relationship.

Before we discuss the theoretical and practical implications of our research, we note several important limitations. Although our objective was to examine psychological ownership for the organization across a broad range of jobs in a broad range of settings, our study is bounded by cultural and geographic factors. Future research should examine psychological ownership in different settings such as in European settings where different legal arrangements and social programs may influence employee conceptualizations of ownership (Rousseau & Shperling, 2003). We also recommend research in non-Western settings where cultural values such as collectivism and role obligations may reduce the effects of psychological ownership on employee behavior.

In addition, since our study is an initial step toward understanding the link between psychological ownership for the organization and workplace attitudes and behaviors, our model is incomplete and under-specified. Future research should consider a wider range of concepts that are theoretically relevant to psychological ownership. Similarly, although we examined the incremental validity of psychological ownership over and above organizational commitment and job satisfaction, future research should further refine the distinctiveness of psychological ownership compared to a broader range of constructs. For example, it would be useful to compare the incremental validity of psychological ownership with that of proactive personality (Crant, 2000) and psychological empowerment (Spreitzer, 1995). Finally, while the pattern of observed relationships supports our hypotheses, the cross-sectional design prohibits causal inferences. We encourage other researchers to examine these relationships and to extend our work by using experimental and/or quasi-experimental designs that assess causality.

In discussing theoretical implications, we note the interesting contrast for job performance versus organizational citizenship. While psychological ownership for the organization predicted citizenship (beyond the controls, commitment, and satisfaction), it did not add explanatory value to performance beyond that contributed by demographic characteristics, commitment and satisfaction (Hypothesis 3). Although this differs from past theoretical predictions (Pierce et al., 2001), the contrasting relationships for performance and citizenship are consistent with VandeWalle et al.'s (1995) results showing attitudes were more strongly related to discretionary behavior than to role performance.

This contrast has important theoretical implications because it suggests psychological ownership for the organization has special relevance to volitional behavior such as organizational citizenship and extra-role behaviors. In contrast, psychological ownership for the organization may have less relevance to required behaviors where role constraints are a critical limit on individual variability in role performance (Organ, 1988; Van Dyne & LePine, 1998). Accordingly, we recommend additional theory development based on the psychology of possession (Furby, 1978; Wilpert, 1991) that delineates situations where psychological ownership should have stronger versus weaker effects.

Drawing on the psychology of possession, we recommend that future research refine conceptualization of the target of ownership. In this research, we focused on psychological ownership for the organization. Yet, feelings of ownership can form around multiple targets (Beaglehole, 1932; Belk, 1988; James, 1890/1950/1963; Kline & France, 1899). Thus, researchers may want to extend past theorizing to include a more fine-grained view of psychological ownership. This could include possessiveness toward specific targets (such as the work group, work in general, work equipment, and products and services produced during work time). In addition, we think it would be interesting to develop theoretical predictions specifying *when* certain targets of possession would be salient to employees and *how* feelings of possession for these specific targets might influence work-related attitudes and behavior.

Future research should also assess an expanded set of outcomes. This could include positive feelings of empowerment (Spreitzer, 1995) or resistance to change (Dirks et al., 1996). For example, when change is externally imposed, employees with a strong sense of possession may feel threatened and may try to protect their 'turf.' Thus, we do not suggest that a sense of possession is always positive. Perhaps extremely high levels of psychological ownership for the organization are counter-productive. Future research should consider when psychological ownership leads to positive consequences and when the consequences are more likely to be negative. Shifting levels of analysis, research could also assess cross-level effects of social structure (e.g., group size, norms, role breadth, interdependence, and culture) on psychological ownership (Spreitzer, 1996).

Given the early stages of research on psychological ownership for the organization, it would be premature to make strong recommendations for practice. At the same time, consultants have emphasized benefits of psychological ownership for years (Brown, 1989; Peters, 1988). Thus, our results provide a preliminary foundation for discussing implications for managers. Since psychological ownership for the organization predicted variance in attitudes and discretionary behavior (beyond commitment and satisfaction), we are optimistic about implications for managers. If our results are replicated, managers may want to pay special attention to employee feelings of possession when employee attitudes (commitment, satisfaction, organization-based self-esteem), and discretionary behaviors (such as organizational citizenship) are critical to work effectiveness. For example, a sense of ownership may be especially important for service employees with direct customer contact and for supervisory employees with discretionary responsibility for decision making. In these situations, managers may want to design work to allow employees the opportunity to exercise control, acquire knowledge, and personally invest in their work (Pendleton et al., 1998; Pierce et al., 1991), thus facilitating positive feelings of possession.

It is also important to acknowledge managerial implications of the potentially negative effects of extreme cases of psychological ownership. This can occur in two different manners. First, as proposed by Dirks et al. (1996), extremely high psychological ownership can cause resistance to change and low cooperation ('stay out of my sandbox'). Perhaps managers should be especially mindful of psychological ownership during transitions and should stress overall shared ownership rather than individual feelings of possession for a particular job. Second, our research suggests that managers should be aware that low psychological ownership can reduce discretionary behavior. This may be particularly relevant for supervisory employees and service employees with direct customer contact and decision-making responsibility because low psychological ownership may have negative implications for quality and customer satisfaction. In these situations, managers may need to intervene and transfer employees to different jobs, redesign jobs to place less emphasis on discretionary behavior, or try to enhance employee feelings of control, knowledge, and personal investment in the work.

In conclusion, although scholars, consultants, and practitioners have described the benefits of psychological ownership, this is the first study to demonstrate that psychological ownership for the organization differs from other constructs that represent work-related attitudes. In addition, the three field studies reported in this paper suggest that the unique emphasis of psychological ownership on possession increases our understanding of and ability to predict employee commitment, satisfaction, organization-based self-esteem, performance, and organizational citizenship behavior. Finally, results of this study provide additional evidence of the value of psychological ownership for the organization by demonstrating that psychological ownership predicts two forms of organizational citizenship (supervisor and peer perceptions), over and above the two most commonly researched predictors of citizenship (satisfaction and commitment).

Thus, our research (which examines psychological ownership in three different samples of employees in work organizations) begins to provide an empirical foundation for future research on psychological ownership. Overall, results demonstrate that psychological ownership increased our ability to predict and understand organization-based self-esteem and organizational citizenship behavior in work organizations, beyond demographic characteristics, commitment, and satisfaction. Accordingly, we recommend that future research should continue to examine the unique contribution of psychological ownership for understanding employee attitudes and behavior.

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# **Author biographies**

**Linn Van Dyne** is Associate Professor, Department of Management, in the Broad Graduate School of Business, Michigan State University, U.S.A. She received her PhD from the University of Minnesota in Strategic Management and Organizations. Her research, which focuses on proactive employee behaviors (such as helping, voice, and minority influence), international organizational behavior, and the effects of work context, roles, and groups on employee attitudes and behaviors, has been published in *AMJ*, *AMR*, *JAP*, *JOB*, *OBHDP*, *ROB*, and other outlets.

**Jon L. Pierce** is Professor of Organization and Management in the Labovitz School of Business and Economics at the University of Minnesota, Duluth, U.S.A. He received his PhD in Organizational Behavior from the University of Wisconsin–Madison. His research is centered on the psychology of work and organizations in general and currently focused on psychological ownership and the self-concept within the work and organizational context.

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