How do virtual community members develop psychological ownership and what are the effects of psychological ownership in virtual communities?

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ABSTRACT

Literature highlights the importance of psychological ownership on individuals' behaviors and attitudes in organizations. Over the years, researchers have developed and extended the theory of psychological ownership; however, despite the emphasis placed on this concept, it has not been tested in online contexts, such as virtual communities. In this study, we show how virtual community members develop psychological ownership of their community and discuss the consequences of such ownership. Drawing on the theory of psychological ownership, we develop a research model that explains three routes of psychological ownership: autonomy, membership duration, and self-discrepancy. We also determine three consequences of psychological ownership: satisfaction, self-concept, and knowledge contribution. In this study, we found that maintaining autonomy and creating a better self in the anonymous environment of a virtual community assists in developing psychological ownership of a virtual community. We also determined that psychological ownership increases satisfaction, self-esteem, and contribution quality. This study will help to support and extend the theory of psychological ownership while providing practical insights for community managers by suggesting ways to vitalize virtual communities.

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1. Introduction

People who feel ownership of an object experience a connection between themselves and various tangible and intangible "targets" (Dittmar, 1992), stimulating organizational behavior. For this reason, researchers have a keen interest in the concept of psychological ownership and its outcomes (Cram & Paton, 1993; Pierce, Kostova, & Dirks, 2001; Pierce, O'Driscoll, & Coghlan, 2004; Pierce, Rubenfeld, & Morgan, 1991). Psychological ownership has been described as a cognitive–affective construct, a state in which an individual feels as though an object or a piece of an object is "theirs" (Beggan, 1992; Pierce, Kostova, & Dirks, 2003); it may also be described as a feeling of possessiveness and of being psychologically tied to an object (Pierce et al., 2001).

After Pierce et al. (2001) proposed the theory of psychological ownership, Pierce et al. (2003) integrated a number of diverse studies from the last century and provided various insights into psychological ownership from the disciplines of psychology, philosophy, sociology, anthropology, and organizational behavior.

They offered a conceptual definition of psychological ownership and theorized about (i) the genesis (dimension) of this psychological state, (ii) the routes to psychological ownership, and (iii) the effects of psychological ownership (Pierce et al., 2001, 2003). The comprehensive theory of psychological ownership offers a conceptual framework and direction for future theoretical development; many researchers have developed and validated measurement instruments of psychological ownership (e.g., Avey, Avolio, Crossley, & Luthans, 2009) and have begun empirical testing. However, a review of the psychological ownership literature reveals that the majority of studies has focused on the consequences of organization-based psychological ownership or job-based psychological ownership (e.g., Brown, Pierce, & Crossley, 2014; Dyne & Pierce, 2004; Mayhew, Ashkanasy, Bramble, & Gardner, 2007). Although Pierce et al. (2001, 2003) emphasized empirical testing of the psychological ownership framework, few studies have tested the three routes to psychological ownership empirically. Moreover, despite the fact that much of the organizational literature emphasizes the effect of psychological ownership on organizational behaviors (e.g., performance, work attendance) and attitude (e.g., satisfaction), only offline work organizations have been used as target contexts. Online contexts have different characteristics from

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offline contexts. Unlike traditional offline organizations, virtual communities lack reward systems and incentives for members to reinforce their activities, including knowledge sharing. This lack of ownership impedes contributions in virtual communities, and communities without voluntary member contributions lack sustainability.

To fill this gap, this study aims to advance the study of psychological ownership by focusing on the processes involved in the development of psychological ownership and the consequences of psychological ownership in virtual communities. In the remainder of this paper, the first section consists of a literature review of psychological ownership. In the next section, we present our research model and put forth hypotheses before describing our methodology. The final section consists of a research summary and discussion as well as implications for future research.

2. Theoretical background

2.1. Theory of psychological ownership

After developing a conceptual model of the processes and effects of employee ownership (Pierce et al., 1991), Pierce et al. (2001) proposed the theory of psychological ownership as it relates to organizations. Researchers and practitioners have continued to study psychological ownership (i.e., the possessive feeling that an object is "mine" or "ours") as an important predictor of employee attitudes and behaviors (e.g., Dyne & Pierce, 2004), primarily as it relates to job organizations.

Psychological ownership has a different conceptual core from other constructs. For example, psychological ownership is "possessiveness," while commitment is a "desire to remain affiliated," and job satisfaction is a "positive or pleasurable emotional state and/or a positive assessment of one's job" (Brown et al., 2014; Dyne & Pierce, 2004; Pierce et al., 2001). Researchers employ the question "How much do I feel this organization is mine?" to assess psychological ownership, but they employ the questions "Should I maintain my membership in this organization?" to assess commitment and "What evaluative judgments do I make about my job?" to assess job satisfaction.

The starting point in providing a conceptual framework for psychological ownership is to identify its targets and assumptions (Avey et al., 2009). When people have a sense of ownership, they experience a connection between themselves and various tangible and intangible "targets" (Dittmar, 1992). In the psychological ownership literature, the term "target" is quite broad and refers to whatever the object of attachment represents to an individual or group. The targets of ownership can become so deeply rooted within people's self-identity that they can be viewed as an extension of the self (Belk, 1988; Cram & Paton, 1993; Dittmar, 1992). Previous studies have proposed roots and routes of psychological ownership. The 'roots' mean 'genesis of psychological ownership' or 'the motives served for the individual by this state, while The 'routes' mean 'how individuals come to feel ownership' (Pierce et al., 2001; Avey et al., 2009).

2.1.1. The dimensions of psychological ownership

In the literature, four roots of psychological ownership have been proposed (Pierce et al., 2001; Avey et al., 2009): self-efficacy, accountability, belongingness, and self-identity. The first root is "self-efficacy," which relates to people's beliefs that they can successfully implement action and complete a specific task (Bandura, 1977). The motive underlying possession is to be in control (Pierce et al., 2001). Being able to control one's actions and to control objects by owning them results in feelings of efficacy and pleasure (Pierce et al., 2001). According to White's

(1959) early conceptualization of ownership and possession, one's feelings of ownership may be inextricably linked to the need for effectance. Feelings of ownership emerge even in young children because of the motive to control objects and to be effectant with their application (Furby, 1991). The second dimension is "accountability," which is the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others (Lerner & Tetlock, 1999, p. 255). Accountability is a component of psychological ownership through two mechanisms: (1) the expected right to hold others accountable and (2) the expectation for one's self to be held accountable (Pierce et al., 2001). The expected right to hold others accountable results in the expectation of information sharing and permission to influence the direction of the target. The third dimension is "belongingness." In terms of psychological ownership in organizations, belongingness may best be understood as the feeling that one belongs in the organization (Avey et al., 2009). When people feel like owners in an organization, their need for belongingness is met by "having a place" in terms of their social and socio-emotional needs being met (Avey et al., 2009). Similarly, a sense of belonging is considered an important factor and has been used as a test for the presence of an online community (Roberts, 1998). Several studies (Lin, 2008; Teo, Chan, Wei, & Zhang, 2003) have suggested the sense of belonging as a mediator in community sustainability in terms of member loyalty and intention to participate in a virtual community. The fourth dimension is "self-identity." Possession is the core concept in psychological ownership, and possessions serve as symbolic expressions of the self; self-identity and individuality are closely connected with possession (e.g., Dittmar, 1992). People have used ownership for the purpose of defining themselves, expressing their self-identity to others, and ensuring the continuity of the self across time (Pierce et al., 2001).

2.1.2. The routes of psychological ownership

Pierce et al. (2001) identified how organizational members come to feel ownership and proposed three major routes to psychological ownership: controlling the target, coming to intimately know the target, and investing the self in the target. As the first route, control represents a key aspect of ownership, essentially indicating the ability to use and control the use of objects (Rudmin & Berry, 1987). In other words, exercising control over an object eventually gives rise to a feeling of ownership of the target (e.g., Furby, 1978; Pierce et al., 2003). As an individual's ability to control increases, he/she will increasingly exercise it as part of the self.

Through the second route, people feel that something is theirs by virtue of being associated with it and feeling familiar with it (Pierce et al., 2001). The more intimately people know an object, the more they consider the target as part of the self (Beaglehole, 1932). An individual's active engagement or association with a target results in the creation of psychological ties to it. Moreover, as an individual obtains additional information about a target of ownership, the connection between the individual and the target becomes more intimate.

The last route involves investing the self in the target. According to studies providing insight into the relationship between work and psychological ownership (Beaglehole, 1932; Rochberg-Halton, 1980; Sartre, 1943), people invest their time and physical effort in their labor and are likely to feel that they own that which they create, shape, or produce. In other words, feelings of ownership towards an object stem from the individual's self-investment (Rochberg-Halton, 1980).

2.2. Virtual community, a voluntary organization in anonymous space

2.2.1. Routes of psychological ownership in virtual communities

A virtual community is defined as an online social network where people with common interests, goals, or practices interact