Place Attachment as a Construct for Understanding Individual Pro-Environmental Behaviors in the Workplace

by

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WP-12-02

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Abstract

Scholars from an array of disciplines have sought to explain why individuals engage in pro-environmental behaviors in various settings. In the field of environmental psychology, place attachment has been identified as a significant predictor of an individual's decision to act in pro-environmental ways. The construct of place attachment has not yet been employed in management research. Nonetheless, it appears that organizational commitment and social identity, regularly used to predict behavior in the workplace, measure some similar dimensions as those found in place attachment. Recognizing possible overlaps among these literatures, as well as some remaining gaps between them, I make a preliminary investigation of how they might jointly contribute to an understanding of workplace pro-environmental behaviors.

Given the continued depletion of natural resources and unsustainable consumption behaviors of companies and individuals, addressing how organizations interact with the natural environment is not only timely but also critical. Among management scholars and practitioners, this awareness has spurred mounting interest in studying organizations' impact on the environment (Berry & Rondinelli, 1998; Christmann, 2004; Haugh & Talwar, 2010; Shrivastava, 1995; Starik & Marcus, 2000; Starik & Rands, 1995). Despite the undeniable importance of organizational-level environmental practices, it is ultimately individuals who put these practices into action. While the environmental impact of one person's behavior may seem rather small, the aggregated environmental impact when a large number of individuals practice the same behavior can be significant (Stern, 2000: 410). Therefore, understanding the causes of individual pro-environmental behavior at work is essential to determining the likelihood of organizational movement toward environmental responsibility

With the focus of much management research remaining solely at the organizational level, scholars have scarcely examined the antecedents of individual pro-environmental behavior. Nevertheless there is evidence from environmental psychology that place attachment predicts these behaviors. Place attachment, in the most general sense, is "the bonding of people to places" (Altman & Low, 1992: 2). Empirical studies indicate that place attachment predicts pro-environment intentions (e.g. Halpenny, 2010) and behavior (e.g. Scannell & Gifford, 2010). Yet, despite the introduction of pro-environmental behavior issues into management (Andersson & Bateman, 2000; Bansal, 2003; Russell, 2008), the concept of place attachment is largely absent from management journals.

To date, much of the scholarship examining human-environment relationships has come from environmental psychology, a field experiencing a surge of interest in individuals' psychological

attachments to place in both built environments [e.g. schools (Marcouyeux & Fleury-Bahi, 2011) hospitals (Devlin & Arneill, 2003), and workplaces (Bringslimark, Hartig, & Patil, 2011; Carlopio & Gardner, 1992)] as well as natural environments (Sundstrom, Bell, Busby, & Asmus, 1996)].

Management scholarship has examined the physical environment in organizations, in particular looking at the material effects of work spaces such as furnishings, barriers in workspaces, lighting, and similar features on outcomes such as desired such as satisfaction, fatigue, perceptions of self-efficacy, performance, and autonomy on employees (see review by Elsbach & Pratt, 2007). Individuals in workplace environments containing "nature-like" elements such as natural light, furnishings made from natural products, or even artwork featuring nature scenes typically had positive feelings and thoughts in response to this type of surrounding (Elsbach & Pratt, 2007: 203). Yet, considering employees' exposure to nature-like artifacts this work does not fully capture individual employees' relationships with the natural environment, because the effects of interacting with actual natural environments are different and more dramatic (e.g. psychological benefits) (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009); or physiological benefits, such as recovery of heart rate in response to 'low-level stress' (Kahn, et al., 2008).

Relating to natural environments, unlike relating with artificial or even nature-mimicking environments, appears to affect humans in unique and generally beneficial ways. For instance, integrating even small elements of nature like flowers and plants into built settings such as hospital rooms has been linked to shorter post-op hospital stays (Park & Mattson, 2009). Similarly, patients with window views of natural settings experienced improved physical and mental health (Raanaas, Patil, & Hartig, 2012) as well as faster recovery following surgery

(Ulrich, 1984) than patients in rooms without these features. Findings exist that support both individuals' tendencies to identify with natural rather than built environments (Schultz & Tabanico, 2007) as well as their preferences for actual nature versus nature-like elements (e.g. preference for a window with a view of nature instead of a plasma display screen showing a similar view) (Kahn, Friedman, Gill, Hagman, Severson, Freier, Feldman, Carrère, & Stolyar, 2008). When the effects of virtual or nature-mimicking features have been compared with actual natural environments, the actual nature settings yield the most prominent effects in terms of positive emotions, enhanced connection to nature, reflection skills, and attention focus (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009). Furthermore, while relaxation session experiences in both natural and simulated natural environments provided benefits such as reduced stress, the natural environment alone generated higher energy and 'altered states of consciousness' thus more likely facilitating 'restoration' for the participants (Kjellgren & Buhrkall, 2010: 464).

The desire for some sort of connection to nature is evident in study findings that compare behaviors of employees with and without windows in their workspaces (Bringslimark, Hartig, & Patil, 2011). Office workers without windows were five times as likely to bring plants and three times as likely to bring nature scene pictures to their work areas than those workers who had windows (Bringslimark, Hartig, & Patil, 2011). In the studies mentioned relating either to encounters with the natural or nature-simulating environment/non-nature environment, a prevailing theme is the unique attachment that individuals feel for the actual natural environment and the distinct beneficial effects the individual experiences as a result.

Clearly, unpacking the full range of variables and interactions potentially informing how an individual responds to an environment is a task beyond the scope of this paper. However, I offer

a way to advance current understandings of an individual's relationship with the natural environment as experienced in the workplace, by introducing the idea of place attachment to management studies.

Accordingly, I argue that in order to understand the behavior of individuals in organizations toward the natural environment, we first need to understand how individuals relate and form attachments to the natural environment. To this end, in this paper I: 1) explore how place attachment has been described in other disciplines, primarily environmental psychology; 2) identify and review analogous constructs in organization studies (i.e. organizational commitment and social identity); 3) compare scale measures among these three constructs (place attachment, organizational commitment, social identity); and 4) draw conclusions emerging from points of commonality and difference in the analogous scales and constructs reviewed. Finally, I discuss implications and future research directions for workplace pro-environmental behaviors.

PLACE ATTACHMENT

Place attachment has shown predictive power to explain why individuals behave in pro-environmental ways. In the term place attachment, 'place' refers to "meaningful location" (Lewicka, 2011: 209) or "the environmental settings to which people are emotionally and culturally attached" (Altman & Low, 1992: 5).

Place attachment, although focused on natural environments rather than people, stresses "affect" (Altman & Low, 1992: 5) and has been compared to attachment theory. Attachment theory suggests that people, in their earliest encounters as helpless infants engaged with caregivers, establish emotionally compelling connections (Hay, 1998; Morgan 2010). According to attachment theory to the extent that a caregiver successfully provides a child with a 'secure

base,' the child feels secure enough to explore the world on his or her own (Bowlby, 1977: 204).

The child's sense of security is manifest in the behavior of moving closer to or farther from the

persons the child loves for varying amounts of time (Bowlby, 1977). Similar patterns of

behavior as those developed in childhood persist throughout a person's life; however, a person's

bases change. Preliminary work indicates that a common process transpires when a child bonds

to a caregiver or to a place (Morgan, 2010). The pattern of 'arousal-interaction-pleasure' that

occurs when a child repeatedly relates to and bonds with a place forms an 'internal working

model' that persists over time forging a place attachment (Morgan, 2010: 18).

Applying this common process perspective addresses two additional issues: first, the level at

which engagement with a place initially occurs and second, the transferability of the sense of

attachment that is formed. Regarding the former, with people, as with places, humans

experience attachment at the individual (or micro) level first. The earliest attachment between an

infant and caregiver is intimate and highly specified directed solely toward the caregiver.

Similarly in attaching to place, an individual first has several personal encounters with a certain

natural place like a park or a lake.

Continuing the comparison, presumably the caregiver may also have particular traits

fostering the child's sense of security. These traits may contribute to the child's desired sense of

security so much so that when they are observed in other (non-caregiver) persons, these persons

seem inherently more familiar, safe, and therefore appealing. Regarding place, particular

features of the park may appeal to the individual such that the specific place becomes meaningful

to the person and a place attachment forms. In turn, the individual may initially feel drawn to

other natural places that have similar features.

Yet as a child bonds to a caregiver, it is not until after a sufficiently 'secure base' (Bowlby,

1977) exists before the child feels able to explore and then replicate additional trusting relationships more broadly with persons other than the caregiver. Eventually the child is able to interact with society, a distinctly macro level encounter. In a parallel manner, over time an individual may transfer the place attachment initially felt for a specific natural place to other similar and perhaps eventually to all natural environments. Though findings concerning transferability are inconclusive, there is some support for the transferability of place attachment (Halpenny, 2010).

Researchers across a diverse range of fields including architecture, anthropology, sociology, psychology, urban planning, social ecology, marketing (Altman & Low, 1992: 1-2), forestry (Williams & Vaske, 2003), geography (Brown & Raymond, 2007), and leisure studies have studied place attachment. Similarly, the settings in which attachment to place has been studied are equally varied, including neighborhoods, sacred places, landscapes, homes, plazas (Altman & Low, 1992: 1-2), and national parks (Williams & Vaske, 2003). Place can refer to any specific natural environment or area that an individual values. In the workplace, for example, place might refer to the specific location where a person works. It may also apply to places affected by the company's behavior (i.e., forested areas if the company uses forest products or the land supporting the forest).

Measuring Place Attachment

Despite the development of numerous place attachment scales, theoretical advancements have not kept pace with scale development, instead receiving only minimal attention (Lewicka, 2011). There has been a proliferation of place attachment scales (see for example, Williams & Vaske, 2003; Williams & Roggenbuck, 1989; Vaske & Kobrin, 2001; Scannell & Gifford, 2010;

Kyle, Graefe, & Manning, 2005). Lewicka advises that the many measures of place attachment "be treated as an 'extended family' of methods rather than as precise measurement tools with well-tested construct validity" (2011: 220). Furthermore, she notes, the majority of published empirical studies have been guided more by an exploratory orientation rather than by a particular theory.

Along with these theoretical and methodological weaknesses within place attachment research, there is a lack of consensus regarding how many dimensions comprise place attachment. Most commonly place attachment incorporates dimensions such as place identity and place dependence to capture the process through which individuals form bonds with places. The first dimension 'place identity' refers to an attachment to a particular place based on emotions or its meaningfulness to an individual (Williams & Roggenbuck, 1989; Williams & Vaske, 2001: 831). 'Place dependence' a second dimension refers to an attachment based on how well a place functionally supports an individual's desired activity, for example the presence of a river that enables rafting. (Williams & Vaske, 2001: 831).

With an interest in building on earlier scale development efforts, Williams and Vaske (2003) tested the underlying psychological and behavioral elements that foster place attachment in order to evaluate the construct validity of place attachment and its generalizability as a measure across various places. They suggest a valid measure of place attachment should be able to distinguish between persons with varying degrees of attachment to a particular place while also being equipped to distinguish the degrees of attachment one person may have for myriad places (Williams & Vaske, 2003: 832). As part of the psychometric scaling process, Williams & Vaske (2003) reviewed 61 items that could be made part of a place attachment scale. Results of their statistical analysis supported the validity of place dependence and place identity as dimensions of

place attachment, each accounting for a different kind of attachment (Williams & Vaske, 2003: 836).

Place attachment was found to increase with an individual's perceived level of familiarity with the place, frequency of visiting the location, and view of the place as it being a 'special place' (Williams & Vaske, 2003: 836). Scores within dimensions could be generalized, but not from one dimension to the other. Also, only four items were needed to attain acceptable reliabilities. Importantly, their overall findings indicate that place attachment is not generalizable from place to place, but instead reflects personal relationships with specific places only (Williams & Vaske, 2003: 837). Nonetheless, Halpenny (2010) discovered that some carry-over effects of place attachment might be possible, indicating that park guests who felt attachment to a particular park might also "transfer" this attachment to the natural environment as a whole (Halpenny, 2010: 417). These inconsistencies evidence the need for further development of the place attachment construct.

Analogous Constructs to Dimensions of Place Attachment

Before transitioning to a comparison of the dimensions of place attachment with analogous management research constructs, there are a few constructs outside of management literature that warrant consideration because they support the dimensions that comprise place attachment (again, place identity and place dependence) and relate them to pro-environmental behavior. Figure 1 depicts these analogous constructs and the areas of conceptual overlap and similarity. The studies represented in Figure 1 utilize measures similar to place attachment with most of them predicting pro-environmental behavior to varying degrees.

Insert Figure 1 about here

As reflected in Figure 1 individuals performing pro-environmental behaviors as a result of identity and affective connections to nature are especially prominent in the analogous constructs depicted. There is also substantial overlap between the elements capturing how individuals identify with and feel towards natural places. Comparatively less influential in contributing to individuals' pro-environmental actions is the element of functional attachment or dependence. The significant role of emotions in individuals' forming attachments to nature is perhaps evidence of biophilia – the notion that individuals have inherent connections to nature (Wilson, 1993).

Multiple Dimensions of Place Attachment Predict Pro-environmental Behavior

Multiple studies find a predictive relationship between the dimensions of place attachment and pro-environmental behavior. Pro-environmental behavior refers to individual or group actions that encourage or give rise to using natural resources in sustainable ways (Halpenny 2010; Sivek & Hungerford, 1989/1990). Pro-environmental behavior also includes actions similarly labeled environmentally significant behavior, environmentally responsible behavior, ecological behavior, and conservation behavior. Empirical work has begun to find connections between the dimensions of place attachment and their ability to predict pro-environmental behaviors.

For example, in a study of park visitors that explored whether place attachment would be able to predict both place-specific and pro-environmental intention three dimensions of place attachment were measured: place identity, place affect, and place dependence (Halpenny, 2010:

409). Of the dimensions of place attachment included, place affect and place identity had stronger relationships with "place-specific pro-environment intentions" than did place dependence (Halpenny, 2010: 417). Also, affect though not functioning as a predictor of pro-environment behavior, still had a less well-defined but prevalent influence (2010: 417).

In another study youth participating in a work program at a natural resource center were surveyed to measure their place dependence, place identity, and environmentally responsible behavior. This experiment sought to determine how attachment to a nearby natural resource might impact daily pro-environmental behavior. Two concepts were incorporated to operationalize place attachment: 'place dependence' (described as a functional attachment) and 'place identity' (described here as an emotional attachment) (Vaske & Kobrin, 2001: 16). Results indicated a significant relationship between place identity and pro-environmental behavior, with place identity mediating the relationship between pro-environmental behavior and place dependence (Vaske & Kobrin, 2001).

Generally promoting a person's connection to a natural environment helps in the formation of pro-environmental behavior (Vaske & Kobrin, 2001). The link between attachment to natural places and pro-environmental behaviors is further supported in a study of residents from two distinct British Columbia towns (Scannell & Gifford, 2010). This study compared the relationship between residents' pro-environmental behavior with both their 'natural place attachment' (defined as "a type of physical attachment directed toward the natural aspects of a place") and their 'civic place attachment' (the social bonds or groups a person relates to in a place) (Scannell & Gifford, 2010: 290). In both towns natural place attachment, but not civic place attachment predicted pro-environmental behavior (2010). Both the social and physical aspects of attachment remain features within place attachment studies (Lewicka, 2011).

Management Research: Pro-environmental Behaviors in the Workplace

Though missing the predictor of place attachment, a few empirical studies have focused specifically on individual pro-environmental behavior in the workplace (Andersson & Bateman, 2000; Russell, 2008; Scherbaum, Popovich, & Finlinson, 2008). One example from management research, set in a rather unique work environment, is an ethnographic study that examined how Cree tallymen manage their beaver traplines and particularly how their close connection to and respect for the environment informs their personal environmental management behaviors. This study helped to pave the way for management researchers to consider how managers might similarly engage with the sources of material resources and natural environments (Whiteman & Cooper, 2000). While the authors are careful not to idealize all aspects of the Cree tallymen's practices, they do challenge other managers to learn from the close connection with the natural environment that the tallymen describe having. The authors captured this environmental connection with the term "ecological embeddedness" stating, "To be ecologically embedded as a manager is to personally identify with the land, to adhere to beliefs of ecological respect, reciprocity, and caretaking, to actively gather ecological information, and to be physically located in the ecosystem" (Whiteman & Cooper, 2000: 1265).

Evident in this description of ecological embeddedness and the responses it elicits from the tallymen, is its similarity to place attachment. Parallel to the place identity dimension of place attachment, the tallymen express a distinct personal identification with a particular place. An element of caretaking is also apparent that may allude to an emotional attachment, again an element of the place identity dimension of place attachment. Whiteman and Cooper note, " … our fieldwork demonstrates that the tallyman's strong emotional and spiritual sense of his land continues to guide his management practice" (2000: 1275).

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Place dependence, the second dimension of place attachment, refers to a functional attachment with a particular place. In the case of the tallymen, this connection is explicit in that they are both living and working in the same area and sustaining their livelihoods through and because of a particular place. For managers, the connection may be more attenuated if they are estranged in time and space from the source of their resources, limiting their sense of place attachment. On the other hand, companies that are able to strengthen this connection may elicit similar types of place attachment.

A second study imported an additional facet of pro-environmental workplace behavior seeking to answer the question, "What effect does emotion have on workplace pro-environmental behaviors?" (Russell, 2008: 5). Consideration of emotions as a valuable factor in better understanding employee pro-environmental behavior is similar to the assumption of place attachment, which also recognizes the 'emotional attachment' that people experience with a particular place (Russell, 2008). As commonly espoused in place attachment, the form of attachment is viewed as a positive one. This positive emotional attachment is especially valuable in that it may generate favorable behaviors toward the environment. Findings from Russell's (2008) study seem to support this notion as well, in that positive emotions enhanced pro-environmental behaviors at work, whereas negative emotions hindered such behaviors.

COMPARING PLACE ATTACHMENT WITH ORGANIZATIONAL COMMITMENT AND SOCIAL IDENTITY

While place attachment does not appear in the management literature, analogous constructs exist. To review, the two formal dimensions of place attachment are place identity and place dependence. However, recall that these represent three different conceptual elements: an

identity, an affective, and a dependence component. Organizational commitment and social identity are comparable constructs because each overlaps with at least one of the main components in place attachment.

Organizational commitment has been heavily studied (Allen & Meyer, 1990, 1996; Buchanan, 1974; McGee & Ford, 1987; Meyer & Allen, 1991; Mowday, Steers, & Porter, 1979; O'Reilly & Chatman, 1986; Steers, 1977; van Knippenberg & Sleebos, 2006) allowing for direct comparisons with place attachment. Social identity has also been extensively researched, however, a single dominant preferred scale is less apparent, making direct comparisons of the scales difficult. Accordingly, I compare social identity to place attachment at a conceptual, rather than a scale-item level.

Since place attachment predicts pro-environmental behaviors, it would be useful for future research in managerial research to determine whether place attachment is a distinct concept or whether it overlaps with existing organizational concepts. To this end, in the following section I compare the three constructs of interest (place attachment with organizational commitment, and social identity). I make comparisons at the construct, dimensional and, when possible, at the individual scale-item level. I first describe the components of place attachment and then identify similarities and differences between place attachment and organizational commitment and social identity, respectively. It is not the aim of this section to provide extensive literature reviews for organizational commitment and social identity. Rather, the focus is on comparing the two constructs with place attachment. I also highlight the potential usefulness of place attachment to management scholars.

Organizational Commitment: A Brief Overview

Organizational commitment scales generally focus on measuring three main elements: the reason for the commitment (how it forms), the form it takes (as apparent through a behavior or attitude), and the target of the commitment (to what or whom is an employee committed) (Fields, 2002). The most influential conceptualization of organization commitment is Allen and Meyer's three-component model (Allen & Meyer, 1990; Meyer & Allen, 1991). As per its name, this model is comprised of three components including affective, normative, and continuance components. Affective commitment is an "employee's emotional attachment to, identification with, and involvement in, the organization" (Allen & Meyer, 1990: 1). Thus, employees who have stronger affective commitments stay at an organization because they *want* to (Allen & Meyer, 1990). Part of this desire to remain is derived from the feelings of personal competence and comfort that experiences at work create for the individual (Meyer & Allen, 1991). The second component, continuance commitment, refers to an employee's view that leaving the organization would be costly, so the individual feels a *need* to stay (Allen & Meyer, 1990). Finally, the third part of the model, normative commitment, is the sense of obligation an individual feels to remain with the organization.

Given its psychological orientation Meyer and Allen (1991) postulate that affective commitment could reshape views on a spectrum of organization-relevant behaviors (Meyer & Allen, 1991: 75). In one study, normative and affective commitment to occupation positively correlated with appealing behaviors and intentions (e.g. citizenship, voice) and negatively correlated with unappealing actions (e.g. neglect, intention to leave, absenteeism) (Meyer, Allen, Smith, 1993: 547).

Of the three components of organizational commitment, affective commitment demonstrated

the strongest correlations with performance, attendance, organizational citizenship behavior, stress, and work-family conflict (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Results from meta-analyses revealed that affective commitment, continuance commitment, and normative commitment are uniquely separate components, although there is a great deal of overlap between affective commitment and continuance commitment (Meyer, et al., 2002: 20, 28).

Since the considerations of cost to leave (as in continuance commitment) and an obligation to remain (as in normative commitment) are less relevant in a natural environment setting than in an organizational setting, it is reasonable to anticipate that affective commitment will be the component having the most significant impact in both contexts. As noted above, in organizations this affective connection can lead to citizenship behaviors that positively impact the organization (Meyer, Allen, & Smith, 1993); whereas in natural settings this can lead to pro-environmental behaviors as well as emotional ties to place which help shape a person's identity.

Social Identity: A Brief Overview

Social identity is a well-recognized area of study in the management literature. Most commonly, it is discussed using one of two framings: a social identity lens or an identity lens – both of which are discussed here. Though often conflated, the two are separate but related ideas. Social identity, however, is more closely related to the place identity dimension of place attachment as described below.

Identity theory focuses largely on the many components of one's identity, also called role identities (Hogg, Terry, & White, 1995). The identity literature often seeks to predict individuals' behaviors based on their roles or how commitment and identity salience contribute to the impact of role identities on social behavior (Hogg et al., 1995).

Social identity, on the other hand, focuses on group processes and intergroup relations, the socio-cognitive processes underlying how identity operates, broader membership in social categories (e.g. race, sex, nationality), and the "generative role of identity in groups" (e.g. stereotyping, conformity) (Hogg et al., 1995: 266). One description of social identity theory states that it is a social construct with the ability to pinpoint how an individual's social position influences their actions when reconciled by the self (Hogg et al., 1995: 264).

As constructs, social identity theory and place attachment each offer an explanation for an identity that results from a relationship, with people or with the natural environment, respectively. Social identity theory views identity as a dynamic concept while identity theory suggests identity is more static over time and reliant on roles (Hogg et al., 1995: 266). In considering analogous characteristics of the place attachment dimension of place identity alongside social identity, the dynamic quality of social identity is noteworthy because it supports the notion that it is possible to change, create, or strengthen one's place identity from encounters with nature, for instance. Lastly, social identity refers to one of the ways in which individuals define their "place in society" and is comprised of "those aspects of an individual's self-image that derive from the social categories to which he perceives himself as belonging" (Tajfel & Turner, 1986: 16). In place attachment, however, social identity becomes relevant in considering parallels with the way individuals craft an identity based on their place in nature, not society.

Comparing Elements of Place Attachment to Organizational Commitment and Social Identity

These three constructs have multiple overlaps as well as some unique elements. Figure 2 depicts sample scale items representative of each of main dimensions of the constructs place

attachment, organizational commitment, and social identity, respectively. Recall that the three

conceptual components of place attachment are dependence, identity and affect. Place

attachment scale items are drawn from the measure produced by Williams and Vaske (2003),

where "X" signifies a particular place, such as a park. Scale items reflecting the forms of

organizational commitment: normative, affective, and continuance are selected from (Allen &

Meyer, 1990). Finally, descriptions of the key elements of social identity come from Ashforth

and Mael (1989).

Measure of Place Attachment: Compared with Organizational Commitment

One of the shortcomings of earlier understandings of organizational commitment has been

use of measures that have mistakenly assumed that individuals experience commitment to

"organizations" in which the organization is "viewed as a monolithic, undifferentiated entity that

elicits an identification and attachment" (Reichers, 1985: 469). Instead, some scholars argue that

the relationship individuals have with organizations is, in fact, much more complex in that there

is no single representation of an organization's values and goals (Reichers, 1985). In

organizations, the presence of subgroups holding conflicting or competing interests is

commonplace (Whetten, 1978).

As such, differentiation within organizations that acknowledges the co-existence of particular

subgroups and their goals is necessary, because it is in this context that individuals experience

multiple commitments (to various subgroups) simultaneously (Reichers, 1985). Or more plainly,

many workers perceive 'the organization' as "an abstraction that is represented in reality by co-

workers, superiors, subordinates, customers, and other groups and individuals that collectively

comprise the organization" (Reichers, 1985: 472). With all these groups comprising an

employee's sense of his/her organization, it becomes clear how an employee could experience multiple commitments to the organization simultaneously (Reichers, 1985). A useful perspective of organizational commitment, is one that appreciates "specific commitments" (1985: 473) individuals may have that when summed equal a person's overall/general organizational commitment (Reichers, 1985: 473).

Assuming a "nonspecific" (Reichers, 1985: 472) or monolithic quality is a shortcoming of how organizational commitment has been conceptualized, place attachment measures, by comparison, have been more specific with regard to the object of the attachment. For example, empirical work on place attachment recognizes the uniqueness of particular places (e.g. a particular park, or neighborhood), such that there is no general assumption of a monolithic place of "nature." In fact, that a specific place attachment is not generally transferable to another setting has been one of the few largely consistent findings within the place attachment literature. Yet current empirical work is not conclusive and place attachment research continues to explore if and how connection to the specific may translate to more general attachment. Scale and dimensional measures of place attachment have also been worded in a way that recognizes the unique characteristics and qualities of particular places.

In comparing scale items of both place attachment and organizational commitment, some conceptual overlap becomes apparent. As detailed below, there are some parallels between place attachment and both affective and continuance commitment.

Insert Figure 2 about here

First, place identity and affective commitment have conceptual similarities. Akin to place identity, affective commitment represents an emotional and identification component. Second,

although there is less explicit similarity between place dependence (the second dimension of place attachment) and the continuance and normative forms of commitment, this may depend the interpretation of the dimensions. Common to both place dependence and continuance commitment is the "need" or functional use an individual has for the place (e.g. a natural place, such as a national park; or one's particular workplace, respectively). Note the scale items for place dependence in Figure 2. While the functional characteristic of place in the context of place dependence is likely for personal enjoyment or recreation, the functional aspect of one's organization in continuance commitment is more necessary because an individual anticipates that it would be too financially taxing to leave one's organization (Meyer & Allen, 1991). Thus, the choice to remain in a place (e.g. a work organization) is less of a choice than the "dependence" in place dependence represents. In fact, continuance commitment scale items reflect what might be interpreted as an employee's sense of simply being stuck at one's organization because it is too risky to leave. Therefore, a key element differentiating the continuance commitment dimension from place dependence is the volitional aspect of place dependence.

The role of freedom of choice is an interesting consideration with regard to in place dependence. In a recreational or leisure application, there is a choice of a particular place itself, which is then also accompanied by the performance of a choice of activity in that place. Thus, place dependence affords selecting a place of choice for an activity of choice, and the discontinuing of the chosen form of recreation at the time of choice. In contrast, considering place dependence in the context of human reliance on fresh water supplies for something as basic as survival clearly reduces any sense of pure freedom or choice. Here the dependence is *'forced.'* Another distinction is that a person's dependence on a (natural/outdoors) place necessarily involves less time than the functional dependence on a workplace (continuance

commitment) if we are discussing recreational activities rather than our dependence on global resources. For examples, the duration of a person's employment at an organization will certainly exceed that of the time spent in a natural environment during a picnic, hike, or kayaking expedition.

Finally, the sense of "ought" to stay at an organization as reflected by normative commitment does not appear to have a strong analogous dimension with either of the dimensions in place attachment. Only one item from the normative commitment scale is even remotely similar to either dimension of place attachment. In the normative commitment scale one of the scale items is "I was taught to believe in the value of remaining loyal to one organization" (Allen & Meyer, 1990: 7). If loyalty itself were a central part of one's identity, then it might be possible to construe this as relating to the identity (or identification) quality within place identity.

Measure of Place Attachment: Compared with Social Identity

The most explicit overlap between the construct of place attachment and social identity is the similarity between place identity and the element of social identification that refers to "a perception of oneness with a group of persons" (Ashforth & Mael, 1989: 20). Place identity, as previously mentioned, is attachment to a particular place based on emotions or its meaningfulness to an individual (Williams & Roggenbuck, 1989; Williams & Vaske, 2003). Common to both place identity and social identity is an affective component. In place identity, taking the form of an "emotional attachment;" in social identity, the affective element is implicit in the sense of "oneness" with others in the group. Although Ashforth & Mael (1989) suggest that this oneness refers only to "cognition of oneness, not the behaviors and affect that may serve as antecedents or consequences of the cognition" (Ashforth & Mael, 1989: 35), it is possible that the affective component occurs prior to the cognitions.

Place identity (an emotional attachment) has a social aspect underscored by the importance of relationships. The most important relationships in place identity are those an individual may have with a particular place or with people in a particular place. According to social identity, the most significant relationships are those among individuals within a group as the group understands itself in relation to other "relevant" groups (Tajfel & Turner, 1986: 17). In this sense, then, place identity and social identity operate similarly. Identification with place (e.g. the experience of place identity) indirectly depends upon the existence of a comparison group (i.e. other places or no place at all). For social identity this comparative aspect is also a critical feature.

Just as place attachment has been found to be related to the performance of pro-environmental behavior toward the 'object' to which an individual attaches, social identity (as described by Ashforth & Mael, 1989) prompts individuals to act in a way that reinforces the identity formed as part of belonging to the group to which the individual attaches. This again speaks to a different sort of reference point, rather than an individual acting in a way consistent with one's identity simply for the sake of doing so and for oneself alone (place attachment), social identity adds another layer in that the individual finds it important to act as an "exemplar of the group" clearly bearing one's relationship with the group in mind (Ashforth & Mael, 1989: 35). Thus place attachment and social identity may capture overlapping phenomenon of attachment to an 'object' whether it is a place, group, or organization and identification enacted through exemplar behavior toward that object.

SUMMARY AND CONCLUSION

As a result of comparing constructs from environmental psychology (place attachment) and management research (organizational commitment and social identity), it can be seen that there is some overlap among the constructs, but that there are also substantially novel areas in each. For instance, organizational commitment includes an individual's potential sense of obligation, while social identity recognizes the significance of how a person define self in relation to relevant social groups. Novel to place attachment is most fundamentally the recognition of individuals as part of the natural world, an idea not contained in either of the other two comparison constructs.

Accurately predicting the precise ways in which the dimensions of place attachment may manifest in workplace settings is difficult without additional research in this area. However, it is possible to make some preliminary projections. First, employees who begin to identify with natural places (e.g. place identity) may also view themselves as more intricately connected to a larger ecosystem of human, plant, and animal beings. As such an identity becomes more salient, individual employees may feel responsible for being a caretaker of the environment. Perhaps this may initially emerge as purely a sense of responsibility that thereafter evolves into an emotional connectedness (e.g. affective attachment). Furthermore, perhaps the employee may experience the restorative benefits of a specific natural environment or an integrated workplace environment that has brought elements of nature indoors. In the workplace, the employee may become cognizant of an individual and organizational level dependence (e.g. place dependence) on the natural environment for continued existence to the extent that the employee views the natural environment as a partner in how business is conducted rather than a resource merely to exploit or consume. In turn, the employee may change individual management and consumption

practices finding ways to instead engage in more pro-environmental behaviors at work. Now the employee, having reconnected with the natural environment comes to desire not only self and organizational flourishing but also the flourishing of the environment with which the employee now identifies, feels emotionally attached to, and deeply depends upon for survival and wholeness.

A review of the literature indicates that place attachment has received virtually no attention in management scholarship despite its potential. It may be a construct that would help researchers predict and more fully understand the precursors/antecedents of pro-environmental behavior at work. I have attempted to show that place attachment while having some overlap with existing management constructs, is distinct, most markedly in its explicit inclusion of people relating to the natural environment. In this way, studying the impact of place attachment on individuals' pro-environmental behaviors acknowledges the possibility that individuals (to greater or lesser degrees) are embedded in ecological environments. Even when employees may be physically removed from the natural environment while at work, they bring with them pre-existing experience and memories of encounters with the natural environment which may impact their daily workplace pro-environmental behaviors. Yet more empirical work is needed to establish this relationship. Though it has been suggested that a general theory for [pro-environmental] behavior is far off in time (Stern, 2000: 421), it is here that place attachment can make a valuable contribution.

Furthermore, rich research possibilities for bringing place attachment into management research abound. For instance, studying the transferability of specific attachments to natural places to a more general nature attachment is one such possibility. Or researchers may focus on the physiological and restorative effects employees experience from being in workplaces near

natural environments or nature-integrating work environments. Management scholars may examine how such factors contribute to employee tenure or satisfaction. Lastly, future research may consider the behaviors that occur in the workplace when employees feel a greater connectedness with the natural environment outdoors or experience the integration of natural elements (e.g., vegetable gardens or green spaces) indoors. The time is ripe for a simultaneous study of place attachment, organizational commitment, and social identity to find the joint and distinct capacities to predict workplace outcomes, particularly individual pro-environmental behavior. Perhaps more intentional integration of nature into built work environments could generate attitudes and behaviors that are mutually beneficial to employees, organizations, and the natural environment.

Most employees will never have the outdoor office that the Cree tallymen do (Whiteman & Cooper, 2000); however, they may have deep ties with the natural world. These attachments may directly affect how they see themselves in relation to the natural world as well as how they behave in the built world. Therefore, greater understanding of individual employees connections with place (i.e., the natural environment) could move organizations toward greater respect for and sustainable use of the world's natural environment and resources.

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