

VALIDITY EVIDENCE OF AN OCCUPATIONAL EMBEDDEDNESS MEASURE

By Danelle M. Buyarski

What we know about the factors that leave people feeling stuck to their jobs, organizations and occupations cannot simply be explained by attitudinal constructs like involvement and commitment alone, as they are linked to more than only the job or work. The need to understand and study the construct of occupational embeddedness is directly tied to the progress of our economy, work, culture, communities, families and individuals, by understanding the collection of forces that keep people in their present occupations. This study used scale measures established in previous literature that include similar and dissimilar constructs to occupational embeddedness (OES) to provide evidence of convergent and discriminant validity of an existing, newly developed measure of occupational embeddedness. A sample of 216 working professionals (mostly from a training and organizational development professional organization) was drawn from a Midwestern sector of a national training organization, as well as a local networking organization. As hypothesized and tested via bivariate correlations for each of the eight measures of interest, the dimensions of the occupational embeddedness scale measure provided convergent validity evidence when correlated with measures such as occupational commitment (affective, normative and continuance), occupational withdrawal cognitions, and occupational tenure. As hypothesized, discriminant validity evidence was provided as the measure of social desirability contains items with a small relationship to the content of the items measuring the construct of occupational embeddedness. Study limitations and implications for future research are discussed.

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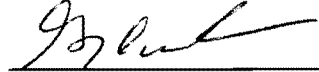
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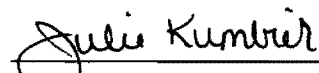
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INTRODUCTION

Researchers in the area of Human Resources, Industrial/Organizational Psychology and Organizational Behavior have shown considerable interest in understanding workers' connection to the work role. Much of this research has focused on the topic of commitment (see reviews by Cohen, 2003; Cooper-Hakim & Viswesvaran, 2005; Meyer & Herscovitch, 2001; Morrow, 1983). Although there are many definitions of commitment, Meyer and Herscovitch (2001) suggest that the essence of commitment is "a force that binds individuals to a course of action of relevance to a particular target" (p. 301). Within the literature on commitment, several broad targets, or aspects of the work role that workers commit to, have been identified. Work role is a scope of work related activities, responsibilities and expectations associated with a worker (Wolfe-Morrison, 1994). These include the worker's job (Lodahl & Kejner, 1965), work (Kanungo, 1982), organization (Meyer & Allen, 1991) and career/occupation (Blau, 1985; Carson & Bedeian, 1994).

Several "bases" or dimensions of commitment have also been identified, most commonly following Meyer and Allen's (1991, 1997) typology. This typology includes three bases of commitment, which are: affective, normative and continuance. Affective commitment is defined as strong emotional ties to, and identification with an organization (Mowday, Steers & Porter, 1982). Normative commitment is a belief that behaviors of commitment to an organization ought to be demonstrated out of obligation (Allen & Meyer, 1990). Finally, continuance commitment is the accumulated benefits to staying with an organization opposed to the cost of leaving, called "side-bets" (Becker, 1960). This line of research has provided a vast

and informative literature regarding some of the antecedents and outcomes of job involvement (Brown, 1996; Diefendorff, Brown, Kamin, & Lord, 2002), organizational commitment (Mathieu & Zajac, 1990; Riketta, 2002, 2008) and career/occupational commitment (Lee, Carswell, & Allen, 2000).

Noting that these forms of commitment have strong attitudinal components including factors both within and outside of the workplace that help determine a worker's connection to it, Mitchell, Holtom, Lee, Sablinski, and Erez (2001) introduced the concept of job embeddedness. Job embeddedness was intended to represent a broader and less affectively loaded array of dimensions that attach or bind people to their jobs (Yao, Lee, Mitchell, Burton & Sablinski, 2004). Research using this construct has shown its relationship to both performance (Sekiguchi, Burton, & Sablinski, 2008) and turnover (Crossley, Bennett, Jex, & Burnfield, 2007; Lee, Mitchell, Sablinski, Burton, & Holtom, 2004). Building on this notion of job embeddedness, Feldman (2007) suggested that people become embedded in their occupations as well. He later renamed the concept occupational embeddedness and defined it as the "totality of forces that keep people in their present occupations" (Feldman & Ng, 2007, p. 353).

Recognizing the need for an instrument to measure this new occupational embeddedness construct, Webster, Adams, Subramony and Perlman (2007) began the scale development process. In brief, they developed an item pool and established the content validity of the items, and then conducted item and factor analyses to establish the psychometric properties of the new measure. The purpose of this study was to extend the work of Webster et al. (2007). This was accomplished by establishing convergent and discriminant validity evidence

of the existing occupational embeddedness scale, identifying similar and dissimilar content scales, and how they are related to occupational embeddedness.

LITERATURE REVIEW

This section begins with a discussion of various targets within the work role that workers become connected to including the job, organization and occupation. It includes a description of how these concepts evolved over time from unidimensional to multi-dimensional (multiple-base) constructs. Then I describe job and occupational embeddedness, and highlight their similarities and differences from other forms of work connections. Following this, I address efforts to develop a measure of occupational embeddedness to date and propose the next steps in this scale development process.

Targets/Bases of Work Role Connection

Job Involvement

Early descriptions of what is now called job involvement focused on what was termed “ego involvement” or individual inclination toward status seeking in their work environment (Allport, 1945). Subsequent researchers felt there was more to be included in that description than a person’s “ego”. They argued that value-orientation toward work and values about the work are internalized into the self (Lodahl, 1964). Guion (1958), as cited in Lodahl and Kejner (1965) found that individuals who are job involved are affected personally by their specific job situation. Lodahl and Kejner (1965) also found persons with high job involvement have a high sense of duty toward their work by being ambitious, upwardly mobile and socially motivated in their work and taking stronger initiative than their less job involved counterparts. A resulting definition taken from a compilation of early job involvement research refers to the extent to

which a person identifies with his or her job, and how the job influences his or her self image. Factorial evidence has shown that job involvement was found to be a multi-dimensional construct (Lodahl & Kejner, 1965).

More recently, research followed up with a multi-dimensional view of job involvement initially suggested by Lodahl and Kejner (1965), identifying factors that influence, and are influenced by job involvement. Paullay, Alliger and Stone-Romero (1994) divided the job involvement measure used in the Lodahl and Kejner (1965) research into two separate constructs: job involvement and work centrality. Work centrality indicates the importance of work in a person's life as separate from involvement in the job. Although the constructs overlap with a small amount of variance, they are different enough to be studied separately.

Paullay et al. (1994) refined the job involvement construct into dimensions of role and setting. Role is defined as engagement in tasks that comprise a person's job, while setting is the engagement a person has performing job duties in the present work environment. The distinction between role and setting can mean that a person is engaged in the job itself regardless of environment, or engaged in the job due to the specific organization they work in. Later research showed that the greater number of hours worked in a job (full-time versus part-time) predicts a higher level of job involvement (Diefendorff, Brown, Kamin & Lord, 2002).

Other research identified the factors that job involvement can predict. Brown (1996) found that job involvement indirectly predicts job performance. In other words job involvement increases motivation and thus influences job performance. Diefendorff et al. (2002) also tested and found that job involvement is linked to various dimensions of organizational citizenship behaviors (OCBs). OCBs can be defined as behaviors such as altruism (selfless actions), civic

virtue (level of involvement in the politics of the organization) and conscientiousness. In this study, OCBs were dimensionalized between behaviors directed toward other individuals in the organization, as well as behaviors directed to the organization specifically (Diefendorff et al. 2002).

Organizational Commitment

The development of the job involvement literature has shown noticeable connections between job involvement and organizational factors like commitment. Organizational commitment was first recognized as the degree to which a person identifies with, and is involved in a particular organization (Porter, Steers, Mowday & Boulian, 1974). Porter et al. (1974) further described organizational commitment as belief in the goals and values of the organization so that an individual puts forth energy on behalf of the organization while sustaining an enduring desire to remain a member. A consequence of organizational commitment is lower incidence of people leaving the organization, also known as turnover. Another way to say this is, the more favorable attitudes (i.e. commitment) people have toward their organization, the less likely they will be to leave (Mowday, 1999; Porter et al. 1974; Steers, 1977).

The meaning of commitment to an organization continued to evolve through research to refine the construct. Meyer and Allen (1984) identified three forms of organizational commitment: affective, continuance and normative. Affective commitment to an organization implies that an individual has feelings of emotional connection and identity so that membership in the organization remains important, and they desire to stay (Mowday, Steers & Porter, 1979).

Becker (1960) originally described perceived costs as “side-bets” or the perception of what will be lost if one was to leave the organization. This was later labeled as continuance commitment, meaning there is a benefit to remaining with the organization and a cost or penalty to leaving, resulting in a need to stay (Meyer & Allen, 1984). Lastly, obligation to an organization means “a person should be loyal to his organization, should make sacrifices on its behalf, and should not criticize it” (Wiener & Vardi, 1980, p. 86). Later labeled as normative commitment, Meyer and Allen (1984) described that people retain membership with the organization for different reasons (i.e. generational chain of family members working with the same organization or location preferences). As noted by Meyer and Allen (1991) individuals can experience each of these commitment components to varying degrees. Depending on the degree to which individuals perceive the desire, need and obligation to stay with an organization, they will behave differently in an organization.

In subsequent research, attitudinal aspects of organizational commitment were later linked to job performance. The original assumption stated that people who are highly committed and work harder are better performers in the organization on the job (Ricketta, 2002). Borman and Motowildo (1997) showed that job performance can be shared between in-role and extra-role activities. In-role performance is fulfillment of job tasks specifically identified by the job description. Extra-role is defined as the completion of additional tasks outside of the job description that go above and beyond the call of the job, such as, working extra hours or helping others in the organization. As a result, better performance can be compensated with incentives such as, higher pay and recognition, and was considered to predict organizational

commitment (Lawler & Porter, 1967). Research showed organizational commitment attitudes are linked positively to job performance, both in-role and extra-role (Rikketa, 2008).

Career/Occupational Commitment

An emphasis on the study of careers is important because the focus for many people is their career (Cooper-Hakim & Viswesvaran, 2005). The range of commitment can be more broadly expanded from job involvement and organizational commitment to the development of the career or occupational commitment construct. In research literature, the labels of career and occupational commitment are used interchangeably. A career is “a series of jobs a person holds over the span of their life” (Feldman, 2007 p. 180). An occupation is seen as a specific line of work that a person takes part in at a specific period of time (Lee, Carswell & Allen, 2000). The development of the career commitment construct began in early research when Morrow (1983) attempted to redefine career salience. Career salience was defined as the significance of career and work to a person, from Greenhaus’ (1971) original research. The general construct definition of career salience overlapped with what we now call the occupational commitment construct.

Commitment to an occupation was defined as a connection and motivation to stay with a particular occupational role over and above that of organization affiliation or job involvement (Hall, 1971, cited in Blau, 1985), as well as sticking with a particular occupation through all stages of life (Marshall & Wijting, 1982). Blau (1985) also described career commitment to be “a person’s attitude toward their profession or vocation” (p. 278). Because occupational commitment is seen as something that connects a person to their life profession, the same

withdrawal tendencies (i.e. turnover) do not apply as they do to job involvement and organizational commitment. A person with high levels of occupational commitment would be less likely to leave their occupation to pursue another (Blau, 1985).

Refinement of the occupational commitment construct has been developed to further understand the impact of occupations in people's lives as changes occur in occupations and organizations, affecting job security and the economy (Carson & Bedeian, 1994). There are links between occupational commitment and retention as well as work performance (Lee, Carswell & Allen, 2000). Further understanding of occupational commitment provides insight into occupational development above and beyond a specific job or organization (Meyer, Allen & Topolnytsky, 1998). The 3-component model of commitment referenced in the organizational commitment literature (Meyer & Allen, 1991) has also been used to describe three aspects of occupational commitment (Lee, Carswell & Allen, 2000): affective (desire to remain in their occupational role), continuance (perceived costs to leaving the occupation) and normative (feelings of obligation to sticking with the occupation).

The variables that predict and are predicted by occupational commitment have also been researched. Occupational commitment has been shown to be linked to job involvement and organizational commitment, especially in professional occupations (Lee, Carswell & Allen, 2000). This may be due to the fact that some occupations are tied to specific organizations and jobs. Lee et al. (2000) also took a look at turnover related variables and discovered that occupational commitment was negatively linked to intentions for turnover, and may also play a role in the impact of organizational turnover, even beyond job satisfaction and organizational commitment. In other words, low levels of occupational commitment can be related to high

levels of organizational turnover, because these two may often be linked. Conversely, those highly committed to their occupation may be less likely to leave the organization and pursue another. There is some positive link between occupational commitment and job performance, but it is not clear what influencing factors (i.e. knowledge and skills or work motivation) strengthen this connection (Lee et al., 2000).

Some additional characteristics that can predict occupational commitment involve those that influence an individual, and the individual's environment. Examples of individual influences are, how primary an occupation is in one's life, control over an occupation, and orientation toward professional development (London, 1983). London (1983) also described predicting situational factors that influence occupational commitment such as, ambiguity towards an organization, clear goals, structure and methods associated with work, as well as supervisor influence over subordinates. Occupational commitment has a trickle-down effect to one's organization and job, therefore the distinction and overlap between them is important to recognize.

Job Embeddedness

The previous literature reviewed above discussed much about the attitudinal/affective aspects related to why people stay with their jobs via commitment. More recently, a new construct was introduced to help define why people stay on their jobs, called job embeddedness (Mitchell, Holtom, Lee, Sablinski & Erez, 2001). The distinction between similar constructs of job satisfaction and commitment versus job embeddedness needs to be made. Embeddedness is distinct in that it not only represents factors that influence attitudes and intentions toward

behaviors on-the-job, but community and social aspects also come into play that influence job behaviors (Crossley, Bennett, Jex & Burnfield, 2007). It is important to understand the full array of reasons and influences that help determine why a person sticks with one job over another. Embeddedness better describes and represents these behavioral influences over mere attitudes and intentions.

Mitchell et al. (2001) introduced job embeddedness, considering the critical aspects of why people become embedded in their jobs through: links, fit, and sacrifice. Links are the degree to which people have connections to other people and activities. The degree to which people's lives align with their jobs and communities is called fit. And finally, sacrifice is the degree of difficulty it would require for a person to break the links; what they would forfeit if they left. Mitchell et al. (2001) identified that job embeddedness links are important to people both on and off the job, therefore suggesting six dimensions associated with both the person's community and organization. The greater the extent of fit, higher number of links and level of sacrifice, the more embedded an individual will be in his or her job (Sekiguchi, Burton & Sablynski, 2008).

To better help understand the Mitchell et al. (2001) logic of links, fit and sacrifice, it can be described more fully in how they align with job embeddedness behaviors. Both professional and personal connections to other people and events in their community can be seen as linkages. "Strands" that attach a worker and family to his or her work groups and physical community environment creates stronger aspects of embeddedness. The more complementary a worker's knowledge, skills and abilities are to his or her job, the stronger the fit to the organization. The more people's values, goals and lifestyle align with the community, the

stronger the fit and the more embedded they will be in their jobs. If the connections between links and fit are strong from a person to a job, community and organization, the stronger the level of sacrifice will be required in order to leave. The real costs to leaving a job and community can be both personal (i.e. relationships, likeable environment, clubs and associations) and professional (i.e. pension, stock options, health care, salary). Therefore, the higher the level of sacrifice indicates stronger links, fit to a job and overall strength of embeddedness, also known as the “theory of staying” (Mitchell et al. 2001).

Mitchell et al. (2001) separated the construct of job embeddedness between on-the-job and off-the-job dimensions, and then studied their outcomes. On-the-job embeddedness indicates how “enmeshed a person is in the organization” and off-the-job implies how “entrenched a person is in their community” (Crossley, Bennett, Jex & Burnfield, 2007, p. 1031). Lee, Mitchell, Sablinski, Burton and Holtom (2004) found that on-the-job embeddedness is positively related to organizational citizenship behaviors (OCBs) and job performance, whereas off-the-job embeddedness is linked more highly to community factors such as, family related associations or participation in volunteer opportunities, i.e. Habitat for Humanity. This is to say that external influences like family and social aspects influence job outcomes differently than on-the-job work specific attitudes and behaviors, which directly apply to work related outcomes.

Holtom and Inderrieden (2006) researched the connection between “shocks” and job embeddedness. Shocks are considered a significant jarring event that affects the way a person feels about his or her job, which may lead to voluntary turnover. They may be events that are either directly or indirectly related to his or her job (i.e. changes that impact family members or

work-role changes). Holtom and Inderrieden (2006) described that these shocks can run the gamut between negative and positive (i.e. from losing a child to winning the lottery). If a worker is connected to his or her job and community by high levels of fit and links, a stronger shock will be needed to upset job embeddedness.

Throughout the embeddedness literature, job and organization have been used somewhat interchangeably, since a connection to a particular job often means a tie to an organization (Mitchell et al., 2001). Like in the commitment literature, job and organizational embeddedness should be considered separately, even though they are not studied separately. A person may be embedded in their organization even if they are not embedded in the job. Therefore a person may seek out a different job within that organization. Feldman and Ng (2007) discuss that job and organizational embeddedness are different constructs prior to their talk about occupational embeddedness, despite their overlap in practice.

Occupational Embeddedness

Even more recently studied than job embeddedness is occupational embeddedness. Occupational embeddedness is “the totality of forces that keep people in their present occupations” (Feldman & Ng, 2007 p. 353). Occupational embeddedness closely parallels job embeddedness with the idea that individuals may become embedded in both their jobs and careers (Feldman, 2007). Career and occupation have been used interchangeably in past research literature surrounding embeddedness. Both career and occupation have been defined previously in this review, and are defined differently. For the purpose of this study,

occupational embeddedness will be used, as it is defined by all forces that connect people to their current occupation, within the life-span of the career.

Feldman (2007) described the occupational embeddedness construct as comprised of the following dimensions: (a) the extent to which individuals have ties and attachments with other individuals and activities, (b) the extent to which their occupations and communities are well-matched with or fitting to other areas of their life, and (c) the degree of sacrifice individuals would be subject to if they followed an alternate occupation. As defined and described in previous discussion, this is also known as links, fit and sacrifice. Feldman (2007) argued that these three dimensions have components influenced by both job/work and community, which produces six dimensions.

Links that are particular to an occupation are influenced by both job and community components (Mitchell et al., 2001). Links are strengthened by the degree of time spent in an occupation, as well as the relationships made over time, and the knowledge, skills and abilities acquired throughout this occupation (Feldman, 2007). Job links in occupational embeddedness are ties to colleagues, customers and other individuals connected to the work, as well as the connection to knowledge, skills and abilities acquired through work. For instance, working with the same individuals and completing the same job tasks for a length of time, strengthens social ties and job skills, therefore strengthening the links to the occupation. Community links are ties to people, groups and activities in the community (Mitchell et al., 2001). Participation in church activities and fitness clubs are examples of community links. Therefore, the more ingrained these connections are over time, the higher levels of embeddedness there will be in the occupation.

The key difference between occupational embeddedness and job and organizational factors includes the degree of fit or misfit (Feldman, 2007). Occupational fit can also be associated with work and community factors (Mitchell et al., 2001). In terms of community, fit can be viewed as value-fit or lifestyle-fit (Feldman, 2007). Value-fit is an alignment of personal values to those of the community. This can mean a person's values align with the social and religious norms of the community. Lifestyle-fit indicates personal alignment with the activities and leisure offerings of the community. For instance, an individual with a strong interest in culture and performing arts would fit well in a community that has museums and performing arts centers. Work-fit is an alignment of a person's knowledge, skills and abilities to their work role and requirements of the position. Poor work-fit may lead people to consider an alternate occupation. For instance, an individual who identifies and fits more comfortably in a job that requires independent work may decide to leave his/her job that requires customer service. If the fit of work and community is strong, occupational embeddedness may also be strong. Conversely, if people are dissatisfied with both their work and fit of their community, they will be more likely to consider an alternate occupation (Feldman, 2007).

Sacrifices related to occupational embeddedness run deeper than the individual in the occupation. Sacrifice can also have work and community components. Cited by Feldman (2007) and studied by Stroh, Brett and Reilly (1996), specific costs affiliated with leaving an occupation can affect relationships with family members, friends, associates and financial stability, as well as the occupational lives of spouses and other family members. The cost of leaving social group memberships such as book clubs, parent-child educational affiliations, wine appreciation groups, and local volunteer organizations can be identified as community sacrifices. Work-

related sacrifice is the cost to a person who leaves his or her occupation in spite of the training and professional knowledge and skills that were acquired for a particular occupation (Feldman, 2007). Generally, a person who trained for a specialized occupation (i.e. chiropractor) put forth considerable time, effort and financial cost to create a stable working career. In this case, they may become particularly embedded considering the high sacrifice to leaving. If the cost of leaving an occupation is too great on both community and work levels, people may tend to be more strongly embedded.

Review of the Creation of an Occupational Embeddedness Measure

What we know about the factors that leave people feeling stuck to their jobs, organizations and occupations cannot simply be explained by attitudinal constructs like involvement and commitment alone, and they are linked to more than only the job or work. The need to understand and study the embeddedness construct is directly tied to the progress of our economy, work, culture, communities, families and individuals, by understanding the “totality of forces that keep people in their present occupations” (Feldman & Ng, 2007, p. 353). Considering the incidence of involuntary job loss, ease of mobility and higher prevalence of career transition, it seems that people may not stick with the same job and occupation for their entire lives, therefore understanding the reasons behind why they stay and why they leave is critical. The occupational embeddedness construct more fully includes all of these forces that impact career decision-making by providing insight into the overall level of connection people have to their occupation. Occupational embeddedness also provides an understanding to why people struggle in changing their occupations (Webster et al., 2007).

Occupational embeddedness is a topic that has been emerging in the literature with an emphasis on its varying dimensions. Modeling Feldman (2007), a similar approach was taken to examine the occupational embeddedness factor dimensions of links, fit and sacrifice related to an individual's occupation and community (Webster et al., 2007). Webster et al. (2007) believed occupational embeddedness is more strongly connected to occupational variables rather than organizational variables. Webster et al. (2007) created a study to assess the six dimensions of occupational embeddedness. They developed an item pool incorporating the content domains of the six dimensions of occupational embeddedness and demonstrated content validity evidence for these items. The items created were intended to measure occupational links, occupational fit, occupational sacrifice, as well as community links, community fit, and community sacrifice.

Through item and factor analysis, the study resulted in an instrument with 23 final items (Webster et al., 2007). The dimensions of occupational and community items did not fall cleanly into the fit, links and sacrifice dimensions. Occupational fit items were shared with a new emerging dimension labeled, occupational fit-social. Their study suggested that individuals can fit in their careers through skills and abilities needed as well as the people associated with their career. Also, the community items revealed a community-family dimension that was not anticipated. This suggests that family can play a strong, influential role upon individuals' planning a career change. Individuals will likely consider the effects on their family before making a career change decision (Webster et al., 2007).

Purpose of the Study

Because occupational embeddedness is a relatively new construct, a completely developed measure has not been created. In order to more fully develop the measure created by Webster et al. (2007), it is important to examine correlates of occupational embeddedness to show that the measure relates to these correlates in expected ways. A better understanding of occupational embeddedness is important because it likely relates to occupational withdrawal cognitions (Blau, 1985; 1988), multidimensional aspects of occupational commitment (Carson & Bedeian, 1994), and occupational tenure (Bedeian, Pizzolato, Long & Griffeth, 1991; Cohen, 1991). Also, understanding occupational embeddedness may be important in terms of understanding the impact of occupational changes and/or involuntary job loss for working people and their families.

The purpose of this study is to expand the nomological net of factors that came out of the initially developed measure by Webster et al., (2007) of occupational embeddedness and aim at developing a more psychometrically sound measure. This study will extend what was produced in the Webster et al. (2007) study based on their implications for future research, by establishing convergent and discriminant validity evidence of the existing occupational embeddedness scale, identifying similar and dissimilar content scales, and how they are related to occupational embeddedness.

HYPOTHESES

In the sections that follow, the correlates of occupational embeddedness are fully described in order to show the bases for hypotheses related to the validation of this measure. In order to test construct validity, similar theoretical constructs are examined. These include: occupational withdrawal cognitions, occupational commitment and its dimensions, and occupational tenure. Discriminant validity evidence is provided by examining the relationship between the dimensions of the occupational embeddedness measure and an unrelated content scale, social desirability.

Occupational Withdrawal Cognitions

Individuals with high levels of occupational embeddedness are typically less likely to have thoughts of career withdrawal (Blau, 1985) and are more “stuck” to their careers (Feldman & Ng, 2007). Occupational withdrawal is an intention to change careers to some occupation that is different from what is expected in the natural progression of a career (Rhodes & Doering, 1983). Rhodes and Doering (1983) hypothesized that the occupational withdrawal process includes thoughts about occupational change, intentions to seek an alternate occupation, seeking an alternate occupation, intentions to change occupations and actual occupational change. The occupational withdrawal process can be linked directly to occupational satisfaction, personal factors and work outcomes. If people are dissatisfied with their occupation, they will be more likely to withdraw. Personal factors can include the influence of a spouse and family. For example, if a worker’s spouse has a particular work opportunity in another location, and

opportunities are lacking in the worker's current occupation, he or she may be forced to withdraw and find another occupation (Aryee, 1993). Work outcomes related to occupational withdrawal cognitions can include earning potential and obsolescence of work skills (Aryee, 1993). If a worker can find higher earning potential in another occupation, he or she may consider changing occupations. The inability or lack of desire to improve work skills affiliated with an occupation may be an additional reason to change.

As previously described, occupational embeddedness encompasses the dimensions of links, fit and sacrifice associated with both community and work factors (Feldman, 2007), with a likely negative relationship to occupational withdrawal cognitions. Noting the influence of personal factors and work outcomes on career withdrawal (Aryee, 1993), it is evident that similar factors surround the community and work dimensions of links, fit and sacrifice through occupational embeddedness. To build an argument based upon Feldman's (2007) research, workers who experience many links, (ties and attachments with other individuals and activities in the community and through work), may be less likely to withdraw from their occupation. Workers who experience high degrees of fit through the community and work components of their occupation, or (the extent to which their occupations and communities are well-matched with or fitting to other areas of their life), may also be less likely to withdraw. Finally, if the degree of sacrifice individuals would be subject to if they followed an alternate occupation is too great, an individual may not decide to withdraw from his or her current occupation (Feldman, 2007). If all experiences of these dimensions are strong, intentions toward occupational withdrawal are likely to be much less. For this study, convergent validity evidence of the

occupational embeddedness measure will be provided with a strong, negative correlation to occupational withdrawal cognitions.

Hypothesis 1: Occupational embeddedness is negatively related to occupational withdrawal cognitions.

Occupational Commitment

Because occupational embeddedness includes the totality of forces that enables people to stick to their occupations, one of those forces will likely include occupational commitment. An indicator of occupational commitment includes an unwillingness to relinquish the positive achievements that result from working in a particular occupation for an extended period of time (Carson, Carson & Bedeian, 1995). Giving up achievements from working in an occupation can also be called sacrifice (Feldman, 2007). Considering that employment is increasingly less guaranteed due to fluidity of economies, society, organizations and most working environments, people cannot rely on working solely for one organization for their entire lives (Colarelli & Bishop, 1990; Lee, Carswell & Allen, 2000). As a result, more educated people have become increasingly committed in their occupations (Carson & Bedeian, 1994) because the knowledge, skills and abilities acquired through occupational training allows them to be more flexible to work in various organizations in the same occupation throughout their career cycle. These knowledge, skills and abilities acquired through work can also be considered links (Feldman, 2007). In order to build on this dimensional theory from Feldman (2007), a person who is committed to his or her occupation may also feel that there is a good fit between his or her values and the occupation itself. For instance, a person who is interested in helping people

through his or her work may express this through work in an occupation such as a physician. An individual who is enabled to help others through work as a physician may feel committed to that particular occupation, and as a result struggle with sacrificing the occupation for various reasons. Therefore, the totality of forces that bind individuals to their careers (Feldman, 2007) should be positively related to, and include occupational commitment.

As previously discussed, occupational commitment has also been defined as multidimensional including affective, normative and continuance occupational commitment (Meyer, Allen & Smith, 1993). This concept was adapted from the multidimensional organizational commitment research (Meyer & Allen, 1991). Affective occupational commitment is having emotional ties to one's occupation. Normative commitment is a sense of obligation to one's occupation, and continuance occupational commitment is the costs affiliated with leaving one's occupation (Meyer et al., 1993). Upon closer inspection of the Meyer et al. (1993) measure of continuance commitment, Carson, Carson and Bedeian (1995) identified an overlap between entrenchment and continuance commitment to an occupation. Entrenchment focuses on the perceived cost to leaving, as well as a perceived lack of alternative occupational opportunity.

The occupational continuance commitment construct is now viewed to also to include the aspects of entrenchment, and is labeled occupational entrenchment (Carson et al., 1995). The operational definition of occupational entrenchment includes three dimensions: investment, emotional cost/sacrifice and limited alternatives. These investments include the time and money included in training for a particular occupation. The emotional cost or sacrifice is defined by what it takes emotionally to give up the occupation, i.e., losing working

relationships, friendships, networks, and any other accumulated costs associated with an occupation. Finally, a lack of occupational alternatives include a perceived lack of options in pursuing another occupation due to the extent of personal resources invested over time in the current occupation (Carson et al., 1995). If a worker perceives they have alternate occupational alternatives, they may be less likely to be embedded in their current occupation. As a result, the investment in the former occupation may lead to a lack of opportunities in a new occupation (Blau & Holladay, 2006). The resulting measure that came out of a validation study by Carson, Carson and Bedeian (1995) ended with 12 items comprising the occupational entrenchment construct used in this study. Blau and Holladay (2006) used these 12 items to measure accumulated cost, or as labeled and utilized for the current study, continuance commitment (8 items) and occupational alternatives (4 items). Convergent validity evidence for the occupational embeddedness scale will be demonstrated by showing positive correlations between affective, normative and continuance commitment, while the 4 item measure of lack of occupational alternatives is predicted to correlate positively with all dimensions of occupational embeddedness.

Hypothesis 2a: Occupational embeddedness is positively related to affective occupational commitment.

Hypothesis 2b: Occupational embeddedness is positively related to normative occupational commitment.

Hypothesis 2c: Occupational embeddedness is positively related to continuance occupational commitment.

Hypothesis 2d: Occupational embeddedness is negatively related to occupational alternatives.

Occupational Tenure

Time spent in a particular line of work or occupation is related to the varying stages of an occupation. Each developmental stage of a person's occupation can be linked to varying work attitudes and behaviors (Bedeian, Pizzolato, Long & Griffeth, 1991). During the beginning stages of a person's occupation, his or her attitudes toward that work are important (Cohen, 1991). Aspirations for growth and identity in the organization and line of work are more important to people starting out in their occupation compared to those at a mid-level or late-stage in their occupation. Desires for advancement often will have leveled off by the mid to late-stage. The main focus of workers in the early stages of their occupation is an inclination to identify their work with alignment between personal interests, skills, abilities and knowledge (Mowday et al., 1982). During this early occupational stage, workers attempt to build their skills and expand their proficiency in order to make an occupational decision; therefore they are not necessarily bound to any such occupational affiliation (Cohen, 1991).

People in later stages of their career with occupational tenure can feel cemented to their occupations, organizations and jobs (Bedeian et al., 1991), also known as embeddedness (Feldman, 2007). This can be due to a perceived lack of opportunity elsewhere from the current organization and occupation. They also can feel tied to an occupation because they perceive that the psychological and practical investments such as, emotional ties (links), accumulated benefits, education, acquired skills and knowledge (fit) in their occupations are too great

(Reichers, 1986). The sacrifices required to leave an occupation seem to compound the more time a worker spends in that occupation. Therefore, those individuals who spend a great amount of time in their jobs, organizations and occupations tend to be more bonded to them, embedded in their occupation, and less likely to leave to pursue another.

Hypothesis 3: Occupational embeddedness is positively related to occupational tenure.

Social Desirability

Social desirability has been defined as the beliefs people have about behaviors that are socially acceptable and desirable, resulting in people who seek out social approval by means of culturally and socially acceptable behaviors (Marlowe & Crowne, 1961). In research history, social desirability has achieved major status as a psychometric variable. It has been used for construct validation of numerous self-reported personality instruments where small correlations with social desirability scales are provided as evidence of discriminant validity (Barger, 2002). To improve the psychometric validity evidence of many test items, social desirability has been considered and used as a characteristic of test items by its influence on personality test responses in past research (Jackson & Messick, 1958).

Since the Marlowe-Crowne (1960) measure of social desirability was produced, several shortened versions of the measure have been created and subsequently used in research (Reynolds, 1982). The internal consistency reliabilities and factor loadings of items included in several shortened social desirability measures have been tested and retested (see research & reviews, Barger, 2002; Loo & Thorpe, 2000; Reynolds, 1982; Strahan & Gerbasi, 1972; Zook & Sipps, 1985, etc). For the current study, a shortened measure of social desirability was used by

selecting the first 10 items (of the original 33 item scale measure) aligned with attribution (socially approved statements) and denial (socially unapproved statements) to test the variability or differing item content across the two construct scales of interest; social desirability and occupational embeddedness (see Loo & Thorpe, 2000; Ramanaiah & Martin; 1980). Discriminant validity evidence (degree of difference) was demonstrated between the occupational embeddedness scale used in this study, and a social desirability scale. The intercorrelation between social desirability and occupational embeddedness is predicted to be small, thus demonstrating discriminant or divergent validity evidence (Cronbach & Meehl, 1955).

Marlowe and Crowne (1961) provided further discussion on the psychometric benefits of testing culturally approved statements and the denial of socially and culturally unacceptable statements. Social desirability is considered a motivational variable. It can be useful in predicting differences in individual responses of people that have a need for social approval and are motivated to exhibit behaviors that align with perceived culturally and socially desirable behaviors by engaging in them. Individuals less strongly motivated for social approval are better able to resist responding with what seems to be more socially appropriate item responses, offering more realistic responses to other items of the test. Therefore, respondents will form their opinions more freely and respond more honestly. The content of the social desirability and occupational embeddedness scale items greatly differ. The social desirability construct was predicted to correlate highly to like items with overlapping and similar item content, and show a small correlation to unlike items, with differing content (Marlowe & Crowne, 1960).

Consequently for this study, occupational embeddedness will show a small correlation with social desirability.

Hypothesis 4: Occupational embeddedness has a small correlation with social desirability.

METHOD

Participants

The sample for this study consisted of 216 employed professionals ranging in age from 26 to 69 years old ($M = 48.01$, $SD = 9.77$). The response rate for this sample was 14.4%, with 216 respondents out of 1500 distributed surveys. Of these, 30.6% ($n = 66$) were male, 62.5% ($n = 135$) were female, and 6.9% ($n = 15$) had no response to the gender item. Additionally, 75% reported being married or living as married, 18.1% not married, divorced or widowed and 6.9% gave no response to the marital status item. Most of the participants had at least a bachelor's degree (see Table 1) and were White/Caucasian (see Table 2). Participants had clearly defined, but varying professional occupations. The participants' occupations were mainly in executive business leadership, training and organizational development, management, educational administration and other leadership roles (see Table 3). The majority of participants were members or former members of two Midwestern and National United States professional organizations (training and leadership); specifically, American Society for Training and Development (ASTD) and Green Bay, Wisconsin area Chamber of Commerce.

More specifically, the demographics of participants showed a good portion reported having a Master's degree, $n = 88$, 40.7%. The next largest educational category reported by participants with a Bachelor's degree, $n = 46$, 21.3%, (please see Table 1 for educational level frequency values). Fifteen people, 6.9%, did not respond to the educational level item. Most of the survey participants reporting ethnicity were White/Caucasian, $n = 187$, 84.3%. African

American heritage included 3.2% of participants and American Indian included 2.8% responding, and $n = 16$, 7.4% did not respond. Please see Table 2 for other ethnicity values.

Table 1

Frequencies for Education Level

Item (Education)	Frequency	Valid Percent %
Some College	14	6.5
Two-Year Degree	8	3.7
Bachelor's Degree	46	21.3
Some Graduate School	27	12.5
Master's Degree	88	40.7
Doctorate	18	8.3
No Response	15	6.9

Note. $N = 201$, System missing, $n = 15$.

Table 2

Frequencies for Ethnicity

Item (Ethnicity)	Frequency	Valid Percent %
White/Caucasian	182	84.3
African American	7	3.2
Hispanic	4	1.9
Asian or Pacific Islander	1	0.5
American Indian	6	2.8
No Response	16	7.4

Note. $N = 200$, System missing, $n = 16$.

Table 3

Frequencies for Occupation

Item (Occupation)	Frequency	Valid Percent %
Trainer	59	27.3
Manager	49	22.7
Education Administrator	21	9.7
Human Resources	31	14.4
Corporate Executive	19	8.8
Other	19	8.8
No Response	18	8.3

Note. $N = 198$, System missing, $n = 18$.

Procedure

The first step of data collection for this study was to gain permission and access to a sample of individuals with specified occupations. Two professional organizations spanning the Midwestern United States, with one reaching national members (ASTD) and Green Bay, Wisconsin, Chamber of Commerce, were contacted for permission to distribute a survey to their members. Following permission from the professional organizations, member electronic mailing lists were supplied by the organizational contact person. An email that included the study description with directions in how to access the electronic survey and a URL link that directed them to the survey was sent out by the primary researcher to each potential participant. Approximately five days later a reminder e-mail was sent to members requesting that they complete the survey if they had not already, while thanking those members who had already participated. The survey included 68 questions measuring six dimensions of occupational embeddedness, four types of occupational commitment, social desirability, occupational withdrawal cognitions, and demographic items (age, gender, marital status, ethnicity,

occupational title, educational level, years spent with current employer, and years spent in current occupation).

Measures

Occupational embeddedness. The measure for occupational embeddedness came from the Webster et al. (2007) study that employed a 23 item instrument covering the dimensions of links, fit and sacrifice associated with community and work. An example of each is as follows: occupational links, "I have a large network of occupational contacts"; occupational fit, "I fit with the culture of my occupation"; occupational sacrifice, "I would give up a lot if I changed occupations"; community links, "I have many friends in my community"; community fit, "I fit with the culture of my community"; community sacrifice, "My family would experience a lot of distress if we left our community". A 5-point scale was used to record each item response (1 = strongly disagree, 5 = strongly agree). Respective internal consistency reliability values identified to each dimension category in the Webster et al., (2007) study are as follows: occupational links, fit, sacrifice; .69, .73, .76, and community links, fit, sacrifice; .71, .83, and .75.

Occupational withdrawal cognitions. The three items used in this study to measure occupational withdrawal cognitions were created by Blau (1989) and are as follows: (a) I am thinking about leaving the occupation field, (b) I intend to look for a different field of employment; and (c) I intend to leave my current occupation field. A 5-point rating scale was used to record each item response (1 = strongly disagree, 5 = strongly agree). The phrasing of the items was changed in order to generalize to any occupation rather than a specific occupation, as it was originally created. Previous research by Blau (1985; 1988) has shown that

the occupational withdrawal cognitions scale had internal consistency reliability values of .67 at Time 1 and .71 at Time 2 (6 month interval), with .57 test-retest reliability.

Affective occupational commitment. To assess affective occupational commitment in this study, a 6-item measure adapted by Meyer, Allen and Smith, (1993) was used. The items were changed to generalize to any occupation, rather than nursing, as it was in the Meyer et al. (1993) study. An example item is, "My occupation is important to my self-image". An additional change that was made to these items was to positively phrase the reverse coded items in order to keep the rating consistent among each of the items. An example of a transformed reverse coded item is "I dislike my current occupation" to "I enjoy my current occupation". A 5-point rating scale was used to measure responses (1 = strongly disagree to 5 = strongly agree). The source for this measure reported an internal reliability estimate of .85 (Meyer, Allen & Smith, 1993).

Normative occupational commitment. A 6-item measure also created in the Meyer et al. (1993) study to assess normative occupational commitment was used for this study. Again, the phrasing to generalize to any occupation was changed from nursing, and reverse coded items were changed to positive language to keep the rating consistent among items. An item example from this measure is: "I feel a responsibility to continue in my current occupation". A 5-point rating scale was used to measure responses (1 = strongly disagree to 5 = strongly agree). The internal reliability estimate for this measure was .77 in the original source (Meyer et al., 1993).

Continuance occupational commitment. Eight items from Carson, Carson and Bedeian (1995) that were identified and empirically shown to reflect continuance commitment by Blau and Holladay (2006) were used to measure continuance occupational commitment. Sample

items include, "I have too much time invested in my line of work/occupational field to change" and "There would be a great emotional price involved in changing my line of work/occupational field." A 5-point rating scale was used to measure responses (1= strongly disagree to 5 = strongly agree). The internal reliability estimate in the source for this measure was .87 (Blau & Holladay, 2006).

Occupational alternatives. Occupational alternatives was measured using four items from Carson, Carson and Bedeian (1995). These were shown by Blau and Holladay (2006) to be conceptually and empirically separate from the continuance dimension. Sample items include, "I would have many options if I decided to change my line of work/occupational field" and "I am pleased that I have many alternatives available for changing my occupational field". A 5-point rating scale was used to measure responses (1 = strongly disagree to 5 = strongly agree). One item indicating a negative perception of available alternatives were reverse scored, "If I left this occupational field, I would feel like I had no reasonable options", making the scoring consistent across items. The internal reliability estimate for this measure in the original source was .91.

Occupational Tenure. Occupational tenure was measured by a single item that asked, "How many years have you worked in your occupation?" The participants' response to this item provided a continuous value.

Social desirability. Ten items of the social desirability scale (SDS) developed by Marlowe and Crowne (1960) were used in this study. Researchers have developed several shortened versions of the SDS measure in order to enhance the scales usability while combining with several different self-report measures (Loo & Thorpe, 2000). The original 33-item scale was developed using a panel of 10 judges who unanimously categorized the SDS items as either

socially desirable or socially undesirable. This scale was adapted for this study to use the first 10 items (in order) selected from this original 33-item scale that cover an array of socially desirable and undesirable items (Loo & Thorpe, 2000). Sample items used for this study include, “I never hesitate to go out of my way to help someone in trouble” and “if I could get into a movie without paying and be sure I was not seen, I would probably do it”. A 5-point rating scale, as consistent with the other scales used in this study, was used to measure responses (1= strongly disagree to 5 = strongly agree). The internal consistency reliability coefficient of this original 33-item scale was shown to be .88 (Marlowe & Crowne, 1960). Reliabilities for 10-item versions of the social desirability scale have proven to be lower with a range between .49-.75 (Strahan & Gerbasi, 1972).

Data Analysis

Means, standard deviations (M, SD) and Cronbach’s alpha reliability estimates (α) were calculated for each variable. Each hypothesis was tested via bivariate correlations by calculating Pearson correlation coefficients to examine the strength and direction of the relationships between each variable of interest. These variables include occupational withdrawal cognitions, affective occupational commitment, normative occupational commitment, continuance occupational commitment, lack of alternatives, occupational tenure, social desirability, and the six-dimensional measure of occupational embeddedness.

RESULTS

Descriptive Statistics

Table 4 supplies the means, standard deviations and Cronbach's alpha (α) values for each dimension of occupational embeddedness. The inter-item reliabilities are provided for each occupational embeddedness dimension, including the results of appropriate item reverse scoring that produced alpha values above $\alpha = .70$, occupational links, fit and sacrifice, and community links and fit. Since I did not want to alienate those participants without children, two items included in the original embeddedness measure surrounding family and children were eliminated among the community fit and community sacrifice measures. The items removed were: "The community where I live is a good fit for my family" and "My children would undergo a lot of hardship if they had to change schools". This may have been the reason a lower inter-item reliability value resulted for the community sacrifice dimension of occupational embeddedness, $\alpha = .52$. The dimension means range between 2.81 (community sacrifice) and 3.85 (occupational fit), with standard deviations ranging between .64 (occupational fit) and .90 (community links; please see Table 3 for specific respective values).

Table 4

*Reliability Estimates, Means, and Standard Deviations for the Six-Dimensions of Occupational**Embeddedness*

Scale Dimension	Cronbach's alpha (α)	<i>M</i>	<i>SD</i>
Occupational Links	0.74	3.79	0.69
Occupational Fit	0.75	3.85	0.64
Occupational Sacrifice	0.79	3.19	0.84
Community Links	0.71	3.58	0.90
Community Fit	0.79	3.74	0.70
Community Sacrifice	0.52	2.81	0.86

Note. *N* = 216; *M* = Mean; *SD*=Standard Deviation. Items were rated on a 5-point Likert-type rating scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 5 includes the means, standard deviations and inter-item reliability estimate Cronbach's (α) values for each scale: affective, normative and continuance commitment, occupational alternatives, occupational withdrawal cognitions and social desirability. The inter-item reliability values were $\alpha = .81$ or higher for all scales of commitment, occupational alternatives and occupational withdrawal cognitions. The lower reliability value of the social desirability scale, $\alpha = .34$, may be due to item elimination from the original 33-item measure developed by Marlowe and Crowne (1960) to the 10 items used here for this study. Lower reliability values have been seen in other shortened versions of the social desirability scale measure (see Reynolds, 1982; Strahan & Gerbasi, 1972).

Table 5

Reliability Estimates, Means, and Standard Deviations for Affective, Normative and Continuance Commitment, Occupational Alternatives, Occupational Withdrawal Cognitions and Social Desirability.

Scale Dimension	Cronbach's alpha (α)	<i>M</i>	<i>SD</i>
Affective Commitment	0.86	4.11	0.61
Normative Commitment	0.81	2.52	0.72
Continuance Commitment	0.87	2.91	0.72
Occupational Alternatives	0.90	2.39	0.78
Occupational Withdrawal Cognitions	0.95	2.24	1.06
Social Desirability	0.34	3.28	0.37

Note. *N* = 216; *M*=Mean; *SD*=Standard Deviation. Items were rated on a 5-point Likert type rating scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Hypotheses Testing

Hypothesis 1 stated that occupational embeddedness would be negatively correlated with occupational withdrawal cognitions. As can be seen in Table 6, in support of this hypothesis the OES dimensions- occupational links, occupational fit, occupational sacrifice and community sacrifice- each had significant negative correlations with occupational withdrawal intentions ($r = -.32, -.50, -.40, \text{ and } -.21, p < .01$, respectively); however, community links and community fit did not ($r = -.06 \text{ \& } -.10, p < ns.$). Based on these results Hypothesis 1 received mixed support.

Hypothesis 2a stated that each of the dimensions of occupational embeddedness would be positively related to affective occupational commitment. This hypothesis was fully supported as all six dimensions of occupational embeddedness were positively correlated with affective occupational commitment (for specific r values, see Table 6). Hypothesis 2b stated that that each of the dimensions of occupational embeddedness would be positively related to normative

occupational commitment. This hypothesis was fully supported as all six dimensions of occupational embeddedness had significant positive correlations with normative occupational commitment (for specific r values, see Table 6). Hypothesis 2c stated that the dimensions of occupational embeddedness would be positively related to continuance occupational commitment. This hypothesis was also fully supported as all six dimensions of occupational embeddedness was related to occupational continuance commitment (for specific r values, see Table 6). Hypothesis 2d stated that the dimensions of occupational embeddedness would be negatively related to occupational alternatives. This hypothesis was partially supported, as the only significant positive correlations were found between the occupational sacrifice ($r = -.29, p < .01$) and community fit ($r = -.14, p < .05$) dimensions of occupational embeddedness and occupational alternatives.

Hypothesis 3 stated that the occupational embeddedness dimensions would be positively related to occupational tenure. This hypothesis was partially supported with results that show positive correlations between some OES dimensions and occupational tenure: occupational links ($r = .34, p < .01$), fit ($r = .24, p < .01$), sacrifice ($r = .22, p < .01$), community links ($r = .14, p < .05$). Community fit ($r = .08, p < ns$) and community sacrifice were not significant ($r = .07, p < ns$).

Hypothesis 4 stated that the occupational embeddedness dimensions would show a small correlation with social desirability. As can be seen in Table 6, the correlations (r values) between social desirability and all six dimensions of the occupational embeddedness measure were not statistically significant. Thus this hypothesis was supported.

Although not formally hypothesized, several other correlations shown in Table 6 are noteworthy. For instance, age was correlated with occupational links ($r = .30, p < .01$) and fit ($r = .19, p < .01$). This correlation implies that the older the worker is, the more connected to their occupation and experience better fit to their occupation. Educational level was positively correlated with occupational links and fit ($r = .15, p < .05$ for both) and negatively correlated with community sacrifice ($r = -.19, p < .01$).

Table 6

Intercorrelations, Reliability Coefficients, Means and Standard Deviations of Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Occupational Links	(.74)														
2. Occupational Fit	.50**	(.75)													
3. Occupational Sacrifice	.40**	.47**	(.79)												
4. Community Links	.28**	.13	.20**	(.71)											
5. Community Fit	.21**	.22**	.30**	.57**	(.79)										
6. Community Sacrifice	.17*	.14*	.36**	.54**	.52**	(.52)									
7. Affective Occupational Commitment	.52**	.68**	.50**	.17*	.26**	.17*	(.86)								
8. Normative Occupational Commitment	.17*	.28**	.28**	.15*	.14*	.22**	.25**	(.81)							
9. Continuance Occupational Commitment	.42**	.44**	.69**	.21*	.25**	.35**	.52**	.49**	(.87)						
10. Occupational Alternatives	.09	-.04	-.29**	.01	-.14*	-.12	-.02	-.23**	-.34**	(.90)					
11. Occupational Withdrawal Cognitions	-.32**	-.50**	-.40**	-.06	-.10	-.21**	-.56**	-.15*	-.38**	.09	(.95)				
12. Social Desirability	.07	-.07	.02	.11	.00	.08	.02	.14*	.07	.00	.19**	(.34)			
13. Age	.30**	.19**	.08	.12	.03	-.05	.25**	.00	.13	-.07	-.14*	.19**	--		
14. Occupational Tenure	.34**	.24**	.22**	.14*	.08	.07	.24**	.10	.25**	-.18*	-.16*	.07	.61**	--	
15. Education Level	.15*	.15*	-.05	-.13	-.04	-.19**	.08	-.15*	-.01	.18**	-.06	-.03	.17*	.15*	--
M	3.80	3.85	3.19	3.58	3.74	2.81	4.11	2.51	2.39	2.91	2.24	3.28	48.01	15.04	4.10
SD	0.69	0.64	0.84	0.90	0.70	0.86	0.61	0.72	0.78	0.72	1.06	0.37	9.77	10.22	1.35

Note. $N = 216$. * $p < .05$, ** $p < .01$. Cronbach's alpha estimates are in parentheses on the diagonal. $M = \text{Mean}$; $SD = \text{Standard Deviation}$. Items 1-12 were rated on a 5-point Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items 13 & 14 were continuous responses. Item 14 responses were selected values (1-6).

DISCUSSION

In response to calls in the literature (Ng & Feldman, 2007), Webster, Adams, Subramony and Perlman (2007), developed a measure of occupational embeddedness and provided initial evidence of its psychometric quality. The purpose of the present study was to extend that initial work by generating data to test the convergent and discriminant validity of that measure. To accomplish this, I incorporated existing measures into my study with content that was similar and dissimilar to occupational embeddedness and examined the pattern of correlations between them and the occupational embeddedness scale (OES) dimensions. The measures with similar content compared to occupational embeddedness included affective, normative and continuance occupational commitment (investments and alternatives), as well as occupational withdrawal cognitions and occupational tenure. The measure of dissimilar content was social desirability. In general the results support the convergent and discriminate validity of the occupational links, fit and sacrifice dimensions of the OES. The results for the community links, fit and sacrifice dimensions were somewhat more mixed. The results for all of the hypotheses, study strengths, limitations and suggestions for future research are discussed below.

The objective for testing hypotheses 1, 2 and 3 was to examine evidence for the convergent validity of the occupational embeddedness measure. As suggested by previous research, individuals with high levels of occupational embeddedness are typically less likely to have thoughts of career withdrawal (Blau, 1985) and are more “stuck” to their careers (Feldman & Ng, 2007). As expected, a statistically significant relationship was found between some dimensions of occupational embeddedness and occupational withdrawal cognitions. The results

indicated that those professionals who have many occupational links, strong fit, and feel they have much to sacrifice in their occupation and community if they were to leave it will be less likely to withdraw from their occupations. However, the results of the remaining OES dimensions, community links and fit, were not significantly correlated with occupational withdrawal cognitions. This may imply that individuals may not place as much emphasis on whether they have multiple connections or feel a good fit to their communities when making the decision to leave their occupation. Some research by Putnam (1995), implicates the trend of lessening social connectedness, and the loosening bonds within the family (nuclear and extended). This trend is consistent to explain why people may leave their communities more freely (Putnam, 1995) because they feel a lessening connection with their family and communities. According to Putnam (1995) this may be due to technological transformation of leisure, i.e., television, internet social groups, mobility, fewer marriages, more divorces and fewer children. Therefore, this may attribute to the frequency in which people switch occupations or the acceptance and likelihood that people do not stay in the same place for their entire occupational career.

Also in support of convergent validity of the OES measure, the results showed that hypotheses 2a and 2b are supported with evidence of strong, positive correlations between affective commitment, normative commitment and all OES dimensions. In the literature, affective commitment has been defined as strong emotional ties to, and identification with an organization (Mowday, Steers & Porter, 1982). Normative commitment has been defined as a belief that behaviors of commitment to an organization ought to be demonstrated out of obligation (Allen & Meyer, 1990). The outcome of this hypothesis testing showed that those

professionals strongly embedded in their occupations and communities by many links, strong fit and many sacrifices if they left their occupation and community are also affectively committed by having emotional ties to their occupation, as well as a strong sense of obligation to continue in the occupation (normative commitment). Therefore, based on the definitions and measures of affective and normative commitment used in past research, and the results of the present study, there is support for the idea that the six constructs represented in the occupational embeddedness dimensions are related to the similar constructs represented by affective and normative occupational commitment.

Full support of convergent validity of the OES measure was provided by the test of hypothesis 2c, which stated that the OES dimensions would be related to continuance occupational commitment. In previous research, continuance commitment has been defined as the accumulated benefits to staying with an organization opposed to the cost of leaving, called “side-bets” (Becker, 1960). People can feel tied to an occupation because they perceive that the psychological and practical investments such as, emotional ties (links), accumulated benefits, education, acquired skills and knowledge (fit) in their occupations are too great (Reichers, 1986). There proved to be minimal support of hypothesis 2d, in that OES dimensions would be negatively related to occupational alternatives. This outcome partially supported the indication that the more occupational alternatives people perceive to have available to them, the less embedded in their occupations and communities they will be, for this sample. However, the correlation between the OES dimension, occupational sacrifice and continuance occupational commitment (occupational investments and emotional cost), indicates a similarity between the measures. The constructs reflected in both occupational sacrifice and continuance

occupational commitment overlap. Those people with a lot to give up if they were to leave their present occupation due to investments made in the occupation also relates to an emotional cost associated with the relinquishment of these investments. These results provide strong convergent validity evidence between the occupational embeddedness dimension of occupational sacrifice and continuance occupational commitment. Items contained in both measures surround the costs (emotional and tangible) associated with leaving one's occupation.

Significant correlations that supported hypothesis 3 in this study showed that those professionals who have more time working in their particular occupational field have more links to their occupation and community, stronger feelings of fit with their occupation, and more to give up if they were to leave it. These results align with the existing research that states people in later stages of their career with occupational tenure can feel cemented to their occupations, organizations and jobs (Bedeian et al., 1991), also known as embeddedness (Feldman, 2007). As expected, convergent validity of the OES measure and tenure in an occupation was established as occupational tenure correlates strongly with how embedded people are in their occupation and community, via their networks, relationships and work roles. Therefore, those individuals who spend a great amount of time in their occupations tend to be more bonded to them, embedded in their occupation, and less likely to leave to pursue another.

Hypothesis 4 was totally supported and provides discriminant validity evidence of the occupational embeddedness measure. The social desirability scale measure originally developed by Marlowe and Crowne (1960) is often used in personality construct validation studies of this nature. The measure of social desirability contains items with a small relationship

to the content of the items measuring the construct occupational embeddedness included in this study.

Although not formally hypothesized, other conclusions of this study have shown that the results of correlating age with the study variables identified that older professionals, have more ties and better fit to their occupation. Also, older professionals are more emotionally tied to their occupations and less likely to leave. Those professionals with more education tend to experience more ties and better fit to their occupation (Bedeian, Pizollatto, Long & Griffeth, 1991). These results indicate that older professionals may have more education, and professionals with more education may be spending more time in their occupational field.

The results of this study suggest that the occupational embeddedness scale (OES) may be used to support existing research and measures of work-role attachment. One reason for this is because there are important similarities and differences between occupational embeddedness and other forms of work-role attachment. Measures of continuance occupational commitment (Blau & Holladay, 2006) and occupational entrenchment (Carson, Carson & Bedeian, 1995) provide some conceptual overlap in that they both echo the loss of accumulated emotional and tangible investments. The difference is that the occupational embeddedness scale includes a dimensional aspect like family and community that influence people's decisions to leave or stick with their occupation, combined with influences on the individual worker and the occupation itself. This is an additional explanation of variance in occupational withdrawal cognitions that are not included or explained by the entrenchment and commitment measures alone. This coincides with previous research by Cooper-Hakim and Viswesvaran's (2005) based on their appraisal of empirical literature that considers the multiple

measures of diverse forms of attachment or connections to work, and how this consideration can help researchers better understand work-related behavior.

Study Limitations and Implications for Future Research

Limitations of this particular research study derive from sample and measurement issues. The sample consisted of participants with varying professions mainly in the training and organizational development field. These participants were affiliated with two separate professional organizations, one that promotes local networking and business support of its members and another group including a regional sector of a national organization. The responses from the locally supported group may have impacted the outcome of workers feeling that they may be able to stay in their familiar working community, due to networking opportunities provided by the organization, if they were to switch occupations. Perhaps workers without the support of a networking affiliation do not feel as confident about having alternate occupational opportunities in the same working region and particular community. Therefore, participants may have responded differently to the items surrounding community influences on occupational withdrawal and perceptions of opportunities for alternative occupations. Perhaps the use of a sample not specifically from one particular locale would remedy that issue.

Because the participants of this study consisted of mainly “white collar” workers, this issue may impact the generalizability to other, less educated, working populations. Community and social connectivity has different meanings for different people. Therefore, considering this study sample did not include individuals from “blue collar” occupations, we do not know if the

outcomes of this study from this sample of workers can be translated to all occupational populations, specifically if there has been a lesser educational, monetary and time investment in that occupation.

Another limitation may be due to the parsing out of items originally included in some of the scales used to measure each construct for this study. The smaller number of items used in each measure most likely attributed to the lower reliabilities of the adjusted measures resulting in the attenuation of the correlations between them (Murphy & Davidshofer, 1998).

Specifically, by having selected out particular items among the entrenchment, social desirability and occupational embeddedness scales to make the items more relevant and lessen participant fatigue possibly compromised the results with smaller relationships between scales (Goodwin & Leech, 2006). Had the items of each measure been left in their original form, the reliability values and correlations may have been higher.

There are a number of opportunities for future research. One includes the examination of the relationship between occupational embeddedness and job embeddedness (see Crossley, Bennett, Jex & Burnfield, 2007). They share a common dimension, particularly, the community components of occupational embeddedness and the off-the-job dimensions of job embeddedness. However, they are different because a change of jobs or employing organization does not necessarily imply a change in occupation. Therefore, this may indicate that their respective antecedents and outcomes are different. They differ in terms of the target for the component of job embeddedness referring to the job or work itself, as well as occupational embeddedness designated to a person's occupation. Future research that may create some confirmation of these proposed differences may prove relevant.

Another direction for future research is to begin to incorporate and empirically test the role of occupational embeddedness in models of occupational change. One idea is to adapt the approach of Crossley, Bennett, Jex, and Burnfield (2007), who studied a model linking job embeddedness and job turnover, to testing a model linking occupational embeddedness to occupational turnover. Such a model could include measures of attachment and labor market conditions (see Ng, Sorensen, Eby & Feldman, 2007). Research tying labor market conditions to occupational embeddedness research may apply to the state of the world economy at present, and additionally explore the impact of choice versus force behind why people stay or leave their occupations.

Future research could also aim to better understand the antecedents and consequences of people feeling bound to their occupations. A number of propositions regarding these can be found in the literature (e.g., Ng & Feldman, 2007). Some of the propositions include desirability of mobility, which considers that those people who perceive alternate opportunities in their community may not take advantage of relocation with their current employer (Feldman & Bolino, 1998). Other propositions covered by Ng and Feldman, (2007) also include personal differences in values, attachment styles and personality types that may also influence occupational decision-making. Another interesting proposition for future research may include research on working couples level of occupational embeddedness, and how they may influence each other's embeddedness in their respective occupation. The study of occupational embeddedness will potentially contribute to all of these additional topics.

In closing, despite popular assumptions about economic instability, or how economic conditions can influence mobility, people tend to stay in their occupations if they feel connected

to it. During a weak economy, workers may feel a strong desire to stay with their current occupation, organization and community due to the investments or potential loss of those investments if they were to leave. According to Ng, Sorenson, Eby and Feldman (2007), individuals will only feel ready for a change if they believe they can successfully succeed in a new occupation, organization and/or community. Therefore, instead of starting over in a new occupation, individuals may take the opportunity to enhance their skills to protect against job loss or speed up re-employment if job loss should occur in a weak economy. Therefore, the creation, refinement and validation of a measure of occupational embeddedness should provide a useful tool for understanding why people stay or leave their occupations for future research in the areas of worker and work-role studies.

APPENDIX A

Email Sent to Participants

Dear Professional,

My name is Danelle Buyarski, and I am a graduate student in the [Department of Psychology](#) at the [University of Wisconsin Oshkosh](#). I would like to ask for your assistance with a study being conducted to better understand people's attachment to their occupations. Your participation is completely voluntary, but I hope that you will share your opinions.

People invest a great deal of time and money to become professionals. Some stay in their profession a long time while others simply drop out. I believe the dimensions in this survey are key factors in understanding why people stay or leave their occupations. Understanding what leads to one outcome versus the other could potentially be helpful to career counselors, admissions officers at schools and professional organizations.

The member survey is currently available through the website below. It takes just a few minutes to complete (typically about 15 minutes).

SURVEY WEBSITE:

http://www.surveymonkey.com/s.aspx?sm=L6vciTUKmlgHIQcxwylp5A_3d_3d

Please take a few minutes today to complete the questionnaire.

DEADLINE TO RESPOND TO SURVEY IS: 30 June 2009.

Thank you very much for your help.

Danelle M. Buyarski

Department of Psychology

University of Wisconsin, Oshkosh

Oshkosh, WI 54901

Tel: (920) 360-5188

Email: buyard04@uwosh.edu

APPENDIX B

Reminder Email Sent to Participants

Dear Professional,

The ASTD and Green Bay Chamber of Commerce professional member survey is still open. Your input is essential to better understand the influences of people's attachment to their occupations.

If you have already completed the survey, thank you very much for your time and participation.

The member survey is currently available through the website below. It will require a small amount of time to complete (typically about 15 minutes).

SURVEY WEBSITE:

http://www.surveymonkey.com/s.aspx?sm=L6vciTUKmlgHIQcxwylp5A_3d_3d

Please take some time today to complete the questionnaire.

DEADLINE TO RESPOND TO SURVEY IS: 30 June 2009.

Thank you very much for your help.

Danelle M. Buyarski

Department of Psychology

University of Wisconsin, Oshkosh

Oshkosh, WI 54901

Tel: (920) 360-5188

Email: buyard04@uwosh.edu

APPENDIX C

Intent of Study and Informed Consent

University of Wisconsin-Oshkosh Content Document

Dear Professional,

My name is Danelle Buyarski, and I am a graduate student in the [Department of Psychology](#) at the [University of Wisconsin Oshkosh](#). I would like to ask for your assistance with a study being conducted to better understand people's attachment to their occupations. Your participation is completely voluntary, but I hope that you will share your opinions.

This questionnaire asks you a series of questions regarding your occupation, and the community where you live. These are personal opinion questions, so there is no right or wrong answer. There is no need for you to type your name on the survey, or answer any question that you believe could be used to identify you. I will collect no personal identifying information from you. However, if you are using a workplace computer, it is subject to your organization's privacy policy. As a result, if you use your workplace computer I cannot guarantee your anonymity. I recommend that the survey not be completed at your place of work, but rather on a home computer or a computer at a public library.

Your responses will be combined with all other participants' and used for the primary purpose of reporting them in a supervised master's level thesis. The questionnaire will take approximately 15 minutes to complete.

If you have any questions, please feel free to contact Danelle Buyarski (920) 360-5188. If you have any complaints about your treatment as a participant, please call or write: Chair, Institutional Review Board, UW Oshkosh, Oshkosh, WI 54901, Tel: (920)424- 1415. The chairperson may ask your name, however; all complaints are kept in confidence. Thank you very much for your help.

Danelle M. Buyarski
Department of Psychology
University of Wisconsin, Oshkosh
Oshkosh, WI 54901
Tel: (920) 360-5188
Email: buyard04@uwosh.edu

APPENDIX D

Survey

Instructions: Please rate the following items: (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*)

Occupational embeddedness items

1. I would give up a lot if I changed my occupation.
2. I have many strong ties to my occupation.
3. I can reach my professional goals working in my current occupation.
4. If I changed occupations I would give up the investments in my training.
5. Leaving this occupation would require substantial personal sacrifice.
6. If I changed my occupation, I would undergo substantial emotional distress.
7. I continue with this occupation because I don't believe any other occupation could offer the benefits I currently have.
8. I have a large network of occupational contacts.
9. I engage in a variety of occupational activities.
10. I am an active member of the professional association in my field.
11. I have close friends in the same occupation as me.
12. I fit with the culture of my occupation.
13. The people in my occupation are similar to me.
14. My values are similar to those of my occupational colleagues.
15. My occupation allows me to utilize my skills and talents.
16. I have family members who live in my community.
17. I feel like I have a good fit with my community.
18. I fit with the culture of my community.
19. My values are similar to those of my neighbors.
20. My family would experience a lot of distress if we left our community.
21. I have many friends in my community.
22. I have many strong ties to my community.
23. I have too many hobbies to leave the community where I live.

Occupational Withdrawal Cognitions

24. I am thinking about leaving my occupational field.
25. I intend to look for a different field of employment soon.
26. I intend to leave my current occupational field soon.

Social Desirability

27. Before voting I thoroughly investigate the qualifications of all the candidates.
28. I never hesitate to go out of my way to help someone in trouble.

- 29. It is sometimes hard for me to go on with my work if I am not encouraged.
- 30. I have never intensely disliked anyone.
- 31. On occasion I have had doubts about my ability to succeed in life.
- 32. I sometimes feel resentful when I don't get my way.
- 33. I am always careful about my manner of dress.
- 34. My table manners at home are as good as when I eat out in a restaurant.
- 35. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
- 36. On a few occasions, I have given up doing something because I thought too little of my ability.

Affective Occupational Commitment

- 37. My occupation is important to my self-image.
- 38. I am pleased that I entered my current occupation.
- 39. I am proud to be in my current occupation.
- 40. I enjoy working in my occupation.
- 41. I identify with my current occupation.
- 42. I am enthusiastic about my current occupation.

Normative Occupational Commitment

- 43. I believe people who have been trained in an occupation have a responsibility to stay in that occupation for a reasonable period of time.
- 44. I feel obligated to remain in my current occupation.
- 45. I feel a responsibility to continue in my current occupation.
- 46. Even if it were to my advantage, I do not feel that it would be right to leave my current occupation now.
- 47. I would feel guilty if I left my current occupation.
- 48. I am working in my current occupation because I feel a sense of loyalty to it.

Continuance Occupational Commitment

- 49. I have too much time invested in my occupational field to change.
- 50. It would be very costly for me to switch my occupational field.
- 51. I have too much money invested in my occupational field to change at this time.
- 52. For me to enter another occupational field would mean giving up a substantial investment in training.
- 53. There would be a great emotional price involved in changing my occupational field.
- 54. Changing my occupational field would be easy from an emotional standpoint.
- 55. It would be emotionally difficult to change my occupational field.
- 56. Leaving my occupational field would cause little emotional trauma in my life.

Occupational Alternatives

57. Given my experience and background, there are attractive alternatives available to me in other occupational fields.
58. I would have many options if I decided to change my occupational field.
59. I am pleased that I have many alternatives available for changing my occupational field.
60. If I left this occupational field, I would feel like I had no reasonable options.

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