

UNDERSTANDING THE RELATIONSHIP OF JOB EMBEDDEDNESS  
WITH SOCIAL AND HUMAN CAPITAL: THE IMPORTANCE  
OF ORGANIZATIONAL IDENTIFICATION

by

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ABSTRACT

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This dissertation examines organizational identification as a critical moderator of the outcomes of job embeddedness using a survey sample of employees from a hospital in the Southwestern United States. Results suggest that job embeddedness leads employees to develop different types of human and social capital depending on their organizational identification or disidentification. I conclude that employee outcomes are different depending on how employees view their job embedded situations and argue that job embeddedness be reconceptualized to account for different reactions to job embeddedness based on organizational identification. Implications for researchers and managers are also discussed.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
ABSTRACT .....	v
LIST OF ILLUSTRATIONS.....	ix
LIST OF TABLES .....	x
Chapter	Page
1. INTRODUCTION.....	1
2. LITERATURE REVIEW.....	9
2.1 Research on Job Embeddedness .....	9
2.1.1 The Distinction Between Job Embeddedness and Organizational Commitment.....	10
2.1.2 The Multi-dimensionality of Job Embeddedness .....	12
2.2 Breaking Down Human Capital and Social Capital.....	15
2.2.1 Human Capital .....	15
2.2.1.1 Specific and General Human Capital.....	16
2.2.2 Social Capital .....	17
2.2.2.1 Internal and External Social Capital.....	19
2.2.3 Disentangling Differential Effects for Job Embeddedness.....	20
2.3 Identity Theory.....	23
2.3.1 Identity Saliency.....	24
2.3.2 Organizational Identification.....	25
2.3.2.1 Organizational Commitment and Organizational Identification .....	28
2.3.3 Organizational Disidentification.....	29
3. HYPOTHESIS DEVELOPMENT .....	32

3.1	The Role of Job Embeddedness with Human and Social Capital .....	32
3.2	The Role of Organizational Identification .....	33
3.3	The Role of Organizational Disidentification .....	36
4.	METHODOLOGY .....	39
4.1	Sample .....	39
4.1.1	Data Collection .....	39
4.1.2	Procedure .....	40
4.1.3	Sample Characteristics .....	41
4.2	Data Preparation .....	41
4.3	Measures .....	42
4.3.1	Job Embeddedness .....	42
4.3.2	Human Capital .....	44
4.3.3	Social Capital .....	49
4.3.4	Organizational Identification .....	49
4.3.5	Organizational Disidentification .....	50
4.4	Factor Structure and Dimensionality of Constructs .....	50
4.4.1	Control Variables .....	53
5.	RESULTS .....	54
5.1	Preliminary Results .....	54
5.2	Hypothesis Tests .....	55
6.	DISCUSSION .....	63
6.1	Dissertation Contributions .....	63
6.2	Implications for Managers .....	67
6.3	Implications for Researchers .....	67
6.4	Limitations .....	69
6.4.1	Sample .....	69

6.4.2 Method .....	70
6.4.3 Multicollinearity.....	71
6.4.4 The Measure of Job Embeddedness .....	72
6.4.5 Human Capital Measures.....	73
6.5 Conclusion.....	74
APPENDIX	
A. ELECTRONIC INVITATION TO PARTICIPATE IN SURVEY AT TIME 1.....	75
B. MAILED INVITATION TO PARTICIPATE IN SURVEY AT TIME 1.....	77
C. INFORMED CONSENT .....	79
D. ELECTRONIC INVITATION TO PARTICIPATE IN SURVEY AT TIME 2.....	81
E. MAILED INVITATION TO PARTICIPATE IN SURVEY AT TIME 2.....	83
F. MEASUREMENT SCALE ITEMS .....	85
REFERENCES.....	88
BIOGRAPHICAL INFORMATION .....	108



## LIST OF ILLUSTRATIONS

Figure	Page
1.1 Conceptual Model of the Relationship of Job Embeddedness and the Outcomes of Human Capital and Social Capital with Moderated Effects from Organizational Identification and Organizational Disidentification.....	08
4.1 Scree Plot for Human Capital EFA.....	46
5.1 Graph of Interaction Between Job Embeddedness and Organizational Identification with Internal Social Capital .....	59
5.3 Graph of Interaction Between Job Embeddedness and Organizational Identification with General Human Capital.....	61

## LIST OF TABLES

Table	Page
4.1 KMO Test and Bartlett's Test of Sphericity on Human Capital EFA.....	45
4.2 Kaiser Criterion for Human Capital EFA .....	46
4.3 Pattern Matrix Loading for Human Capital EFA.....	47
4.4 Reliability Statistics for Human Capital Scale Validation .....	48
4.5 Item-Total Statistics for Specific and General Human Capital .....	48
4.6 Confirmatory Factor Analysis Scale Dimensionality Results for the Total Sample (N=380).....	52
5.1 Means, Standard Deviations, and Correlations Among Study Variables.....	54
5.2 Regression Results for Hypothesis 1 .....	55
5.3 Regression Results for Hypothesis 2 .....	56
5.4 Regression Results for Hypothesis 3 .....	57
5.5 Regression Results for Hypothesis 4 .....	58
5.6 Regression Results for Hypothesis 5 .....	60
5.7 Regression Results for Hypothesis 6 .....	60
6.1 Suppression Effects in Regression Analysis.....	72

## CHAPTER 1

### INTRODUCTION

Over the past decade, increasing research attention has focused on embeddedness, the idea that individuals may become immersed in their surroundings or circumstances to the extent that it is hard to separate themselves from those situations (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). The idea of embeddedness has been studied in many contexts, and researchers have investigated different types of embeddedness including community embeddedness, or attachment to the area and people where one lives, and occupational embeddedness, or attachment and entrenchment in an occupation. Embeddedness is the idea that individuals can become enmeshed in their surrounding and situation to such an extent that they have a difficult time separating from it (Ng & Feldman, 2009). Job embeddedness has garnered such attention in organizational behavior because it represents a relatively new and useful theory to help explain how an employee's interaction with his or her environment and circumstances influences the person's attitudes and behavior over time.

Job embeddedness is a specific type of embeddedness and represents a large range of factors that influence a person's relationship with a job and organization. The theory was first developed by Mitchell and colleagues to better explain turnover behavior. They referred to a feeling of being entrenched, a "stuckness" to the job, or "a net or a web in which an individual can become stuck" (Mitchell et al., 2001; 1104-1105). That is, job embeddedness encompasses the total forces on an individual that cause the person to remain at his/her current job. Since then, job embeddedness has been empirically demonstrated to impact work-related behaviors such as turnover, performance, absenteeism and citizenship behaviors (Lee, Mitchell, Sablinski, & Burton, 2004; Ng & Feldman, 2009).

Job embeddedness theory developed as a reaction to perceived deficiencies within traditional turnover theory dating back to March and Simon (1958). Turnover theory tends to look at attitudes such as job satisfaction and organizational commitment and whether or not there are job alternatives in determining whether a person will leave the organization. On the other hand, job embeddedness looks at a broader range of work and non-work factors for a more complete view of why people stay with organizations. Turnover researchers have embraced job embeddedness theory because it gives a different perspective for looking at turnover (asking why employees stay instead of why they leave) and includes a larger set of work and non-work factors.

Job embeddedness is comprised of (1) the links one has to others, (2) the fit with the organization and community, and (3) how much one would have to sacrifice to change jobs (Holtom & Inderrieden, 2006; Lee et al., 2004; Mitchell et al., 2001). Job embeddedness is related to turnover by the degree to which an individual has many ties to the community (non-work) and to the work environment itself. The more connections or ties (e.g., social, financial, personal) employees have with an organization or community, the better employees fit with their organization or community, and if they have much to sacrifice (e.g., pensions, home ownership), the less likely they are to leave their jobs. Lee et al. (2004) demonstrated that reduced absenteeism and voluntary turnover were positive outcomes of job embeddedness.

In addition to reduced turnover, job embeddedness research has recently extended to other outcomes such as performance (Sekiguchi, Burton, & Sablynski, 2008) and social capital (Ng & Feldman, 2010). For example, Holtom, Mitchell, and Lee (2006) suggested that organizations might benefit from increased social capital when individuals are embedded in their jobs. This is because job embeddedness represents rich social ties, job fit, and personal investment in a job or organization and the community that in turn create opportunities for the employee to extend and develop new skills and social ties with others (Mitchell et al., 2001; Holtom et al., 2006). Furthermore, empirical evidence has established that job embeddedness

has beneficial effects for other organizational and personal outcomes. For example, Lee et al. (2004) found that job embeddedness was negatively related to absence from work. Absence from work is a withdrawal construct (March & Simon, 1958) while job embeddedness is a retention or anti-withdrawal construct (Mitchell et al., 2001) and, thus, there were significantly fewer absences among job embedded individuals. In general, this early research finds that since job embeddedness was composed of factors such as the overall fit employees have with the organization, it would yield positive outcomes (Ng. & Feldman, 2010).

However, more recent work (Crossley, Bennett, Jex, & Burnfield, 2007) suggests there is a potential downside to job embeddedness that leads to reduced motivation and counterproductive work behaviors. Crossley et al. (2007) suggested that some job embedded employees might feel stuck in unfavorable jobs which could lead to negative outcomes. For example, two individuals might have similar skills, abilities, and overall fit with their organization and community as well as both having many links to important coworkers and friends. Both might have much to sacrifice in the way of pensions, vacation, and seniority if they left their organization. However, one employee may desire to be in a different line of work and may wish to change careers. He/she may be tired of doing the same job for a long period of time but would sacrifice too much to leave. In contrast, the second employee may enjoy his/her job and line of work. The current job is all the employee knows; there is a good fit with the organization and much to lose from starting over. However, this individual desires to grow and improve in his/her role and remain with the current employer. Both employees may be embedded in the true sense of the definition, but one perceives a favorable situation and the other perceives an unfavorable situation.

This dissertation explores the possibility that job embeddedness has different relationships with important outcomes depending on how employees view themselves relative to the organizations they work for. I argue that when job embedded employees see themselves as being one with the organization, they understand and internalize the organization's goals and

values (organizational identification) and they will view their job embeddedness favorably. On the other hand, an employee embedded in a job may disagree with the organization's values, missions, and goals and seek to disidentify from the organization, perceiving job embeddedness as limiting. Thus, each of these two job embedded employees is likely to be qualitatively different from one another, resulting in different outcomes.

To investigate the role of organizational identification and disidentification in determining the effects of job embeddedness, I examine the development of human and social capital. Human capital and social capital are particularly useful employee outcomes for understanding these relationships for two reasons. First, the development of human and social capital may vary among highly embedded individuals (in contrast to turnover behavior). Second, each of these constructs has both internally and externally focused dimensions which is critical to capture the differences in behavior that are likely to flow from the identification versus disidentification of highly embedded individuals.

Human capital consists of the knowledge, skills and abilities that make people productive. These can be specific to one organization or more general knowledge, skills and abilities that are useful across many organizations. Social capital consists of social connections and relationships that allow employees to access knowledge and resources in their organizations and occupations (Adler & Kwon, 2002; Burt, 1992; Coleman, 1988). Social capital consists of both an internal element, those relationships that one forms within the organization that increase the capacity for performance as well as an external component that refers to the relationships formed with colleagues, professionals, and others outside of the organization (Ng & Feldman, 2010). It is important to understand factors affecting human capital and social capital since they are valuable assets to an organization, providing the critical resources (along with financial capital and technology) that organizations use to compete in the marketplace. Human capital supplies the knowledge, skills, abilities and other characteristics that are needed to complete the tasks required in an organization (Becker, 1962; 1964). Social

capital increases functionality, cohesion, and communication (Burt, 1992; Coleman, 1988; Ng & Feldman, 2010).

Ng and Feldman (2010) argued that job embeddedness should lead to the development of human and social capital for two reasons. First, for highly embedded individuals, there is good fit of the employees' existing knowledge, skills and abilities with the requirements of the organization that provides opportunities for the natural extension and development of additional and complimentary skills. Second, the highly embedded employees have many links with more important individuals which provide opportunities to develop additional social capital. In fact, Ng and Feldman's (2010) research demonstrated a positive relationship between job embeddedness and social capital but found declines in social capital development over time. Although this research is important because it is one of the first studies to extend embeddedness research beyond turnover and absenteeism (as well as suggesting negative consequences of job embeddedness), there may be certain boundary conditions under which this relationship does or does not exist. Other factors, particularly self-identity, may play an important role in this relationship. I suggest that a positive or negative relationship between job embeddedness and human and social capital would depend in part on how employees identify with the organization.

Generally speaking, identity is defined as the meaning that individuals ascribe to themselves that helps to define who they are in relation to various roles or groups (Burke, 2004). Identity researchers have established that people have multiple identities to draw from (Burke, 2003) with varying levels of salience (Lobel, 1991; Lobel & St. Clair, 1992; Powell & Greenhaus, 2010). In the workplace, researchers have examined relevant individual identities such as professional, career, occupational, and organizational (Johnson, Morgeson, Ilgen, Meyer & Lloyd, 2006; Lobel & St. Clair, 1992; Riketta, 2005). Organizational identification researchers find that employees who identify with their organizations will associate the organizations' positive characteristics with themselves leading them to see their organization in

a positive light while those who disidentify with their organizations will, on the other hand, try to separate themselves from the organization and will perceive the organization in a negative light (Kreiner & Ashforth, 2004).

Some research has supported the contention that identification moderates how people interpret their current situations. For example, Bagger, Li, and Gutek (2008) found that having a strong family identification moderated the relationship between family-to-work conflict and job satisfaction. They found that although job satisfaction was negatively affected by work-family conflict in both employees with lower family identification as well as those with higher family identification, the negative effect was significantly stronger among those with lower family identification. This research demonstrates that different levels of identification can impact the relationship between antecedents and outcomes differently. The current research focuses on organizational identification and disidentification as playing a key role in defining how employees react to the embeddedness of their work situation, thereby moderating the relationship of job embeddedness with specific and general human capital as well as internal and external social capital.

In this dissertation I seek to demonstrate that employees who are embedded in their jobs will develop different types of human and social capital depending on how they identify with the organization. I suggest that employees view their job embeddedness as being either favorable or unfavorable based on how they see themselves in relation to the organization. When job embeddedness is coupled with disidentification, the individual is likely to build general human capital and external social capital in an effort to overcome the job embeddedness and increase the chances for exiting the organization. On the other hand, when an employee identifies with an organization, job embedded individuals will develop specific human capital and internal social capital thereby strengthening their position and value with the organization. Heretofore, researchers have not addressed the possibility that employees, depending on their situation, can subjectively view job embeddedness differently. I argue that the way employees



view their job embeddedness is critical in determining the outcomes of job embeddedness and the way they view their job embeddedness depends on the employees' identification or disidentification with the organization.

This dissertation contributes to the literature on job embeddedness in three main ways. First, I add to the sparse literature that extends job embeddedness beyond turnover and absenteeism to human capital and social capital. Second, I incorporate specific and general human capital as well as internal and external social capital as outcomes. Previously, one study looked at job embeddedness and its effect on human and social capital over time (Ng & Feldman, 2010), but there is no research into the relationship job embeddedness has with specific versus general human capital. Third, and most important, the current research helps fill the gap of how job embeddedness leads to different types of behaviors and outcomes in the workplace based on how employees subjectively view their job embedded situation. I argue that this subjective interpretation is based on employees' identification or disidentification with the organization. I draw from social identity theory (Ashforth & Mael, 1989; Hogg & Abrams, 1988; Tajfel, 1978; 1981) to help demonstrate that organizational identification will moderate the relationship between job embeddedness and specific human capital and internal social capital, and that organizational disidentification will moderate the relationship between job embeddedness and general human capital and external social capital. In the following sections, I discuss the relationships in my proposed conceptual model (see Figure 1.1).

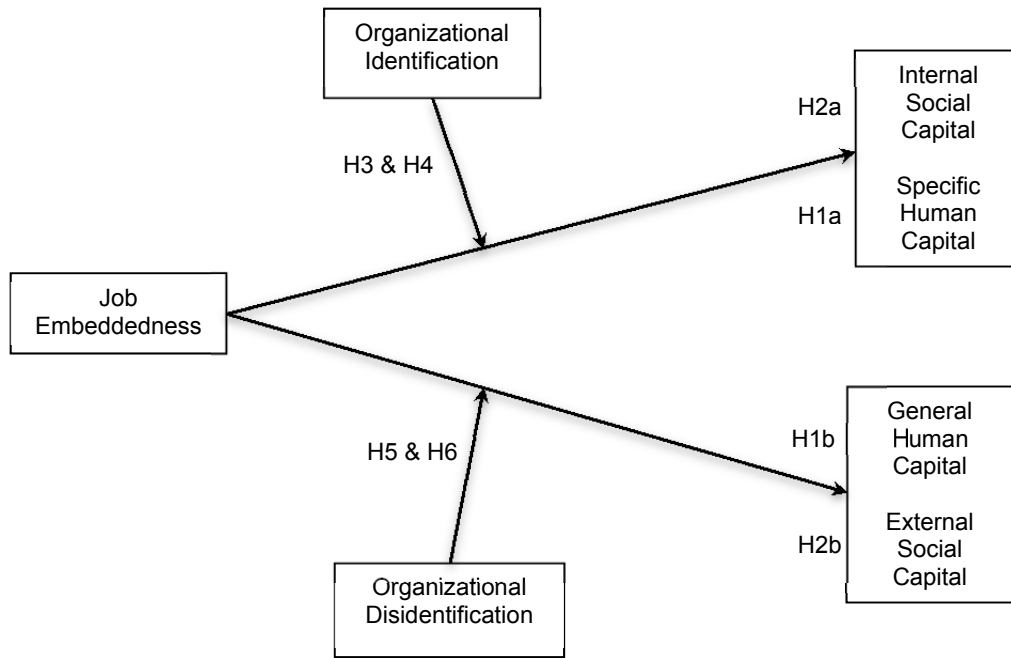


Figure 1.1 Conceptual Model of the Relationship of Job Embeddedness and the Outcomes of Human Capital and Social Capital with Moderated Effects from Organizational Identification and Organizational Disidentification.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Research on Job Embeddedness

Job embeddedness (Mitchell et al., 2001) research grew out of studies into how turnover could be reduced in organizations. However, in contrast to the turnover literature, job embeddedness focuses on staying rather than leaving and represents a large range of ideas that influence a person to stay; it is a retention or “antiwithdrawal” construct (Lee et al., 2004; Mitchell et al., 2001).

In early empirical work, Mitchell et al. (2001) found that embeddedness is negatively correlated with employee intent to turnover as well as actual voluntary turnover. Further, job embeddedness improved turnover prediction when controlling for a variety of turnover-related variables, including job satisfaction and organizational commitment, demonstrating that people embedded in their jobs have less intent to leave and have less actual turnover than those not embedded. Embeddedness also predicted turnover beyond the traditional and much studied satisfaction and opportunity model that was suggested by March and Simon (1958).

Job embeddedness research has continued to follow Mitchell et al.’s (2001) lead by supporting the embeddedness and reduced turnover relationship. Lee et al. (2004) found that job embeddedness (off-the-job) led to reduced turnover as well as predicting organizational citizenship behaviors in a positive manner. Holtom and Inderrieden (2006) examined embeddedness among leavers who exited the organization due to a shock. They found that while 58% of the leavers experienced a precipitating event or “shock” (e.g., marriage or family issue, passed over for promotion, significant alternative offer), embeddedness was still negatively related to voluntary turnover and significantly improved the prediction of turnover beyond job satisfaction.

Job embeddedness is thought to lead to retention and positive employee outcomes through the conservation of resources (Hobfoll, 1989). Halbesleben and Wheeler (2008) found that after controlling for satisfaction and commitment, on-the-job embeddedness was a significant predictor of turnover. They explained this theoretically using conservation of resources theory stating that when considering leaving an organization, losing the resources accumulated (i.e., links & fit) would be a great sacrifice causing people to think twice about leaving and thereby reduce turnover.

#### *2.1.1 The Distinction Between Job Embeddedness and Organizational Commitment*

On the surface, it might seem that job embeddedness and organizational commitment overlap as both organizational commitment and job embeddedness have been demonstrated to reduce voluntary turnover (Lee et al., 2004; Mowday, Steers & Porter, 1979; Mitchell et al., 2001). The distinction between the two constructs has been addressed conceptually and empirically. In their seminal paper, and in numerous studies since then, Mitchell et al. (2001) adequately differentiate between organizational commitment and job embeddedness; the two constructs are significantly correlated yet distinct in numerous ways.

There are various dimensions of commitment such as affective, normative and continuance (Allen & Meyer, 1990), each of which is different from job embeddedness. Allen and Meyer (1990) point out that affective commitment involves an emotional component where the individual likes the organization and wants to stay. Job embeddedness, however, may result from many different factors that might not even include an affective component. An employee may be embedded because he/she has much to sacrifice both at work and in the community, a good fit with the organization, and many social links, but the employee still may not find any pleasure being a member of the organization and be dissatisfied. Thus, although job embeddedness may have an affective component, it does not require affectivity.

Normative commitment reflects a person staying because he/she perceives an obligation to stay. Job embeddedness reflects an encompassing group of factors both at work

and away from work which may or may not include a perception of obligation, but certainly an obligation to the organization would not always be a factor in job embeddedness. Job embeddedness measures the degree to which people feel obligated to remain with the organization because they do not wish to give up valuable work and non-work social ties, work-related benefits, and investments in the community such as a home or community-related projects. Job embeddedness does not measure the degree to which employees feel they should remain with the organization because they are obligated to the organization itself.

Continuance commitment involves the costs an employee will incur based on the amount an employee has invested in the organization as well as the perception of alternative choices the employee has elsewhere (Allen & Meyer, 1990). Although this type of commitment appears similar to the sacrifice dimension of job embeddedness, there are several important distinctions. First, from a job embeddedness standpoint, the decision to remain on the job can include both affective and cognitive considerations. Continuance commitment, on the other hand, is purely cognitive and has no basis in affect at all. Second, continuance commitment is strongly influenced by the perception that there is a lack of alternatives outside of the current organization. Four of the eight items in Allen and Meyer's (1990) measure pertained to the lack of alternatives outside the current organization. Job embeddedness has no qualification related to other alternatives. Third, sacrifice is only one piece of the embeddedness construct – links and fit also play roles in embeddedness, which will help with the distinctions from commitment. Lastly, continuance commitment is purely a work-related construct whereas job embeddedness considers both work and non-work factors. Thus, half of the job embeddedness measure would not have any chance of being related to continuance commitment. The nature of the formative job embeddedness variable is such that confirmatory factor analysis (CFA) is not appropriate (Crossly et al., 2007; Edwards, 2011; Hom et al., 2009; MacKenzie, Podsakoff & Jarvis, 2005)

and cannot be used to differentiate job embeddedness from continuance commitment.<sup>1</sup> However, using theory and correlations researchers have adequately demonstrated the differences between the two variables (Holtom & O'Neill, 2004; Mitchell et al., 2001).

### 2.1.2 *The Multi-dimensionality of Job Embeddedness*

Individuals can experience fit, links and sacrifice in both work and non-work situations, theoretically creating two dimensions. Job embeddedness was originally envisioned as a “totality of embedding forces” that would cause a person to remain employed with an organization. Although job embeddedness consisted of different dimensions such as off-the-job and on-the-job as well as fit, links and sacrifice, it was a “higher-order aggregate of forces for retention” (Mitchell et al., 2001; 1109). From this perspective, job embeddedness should be looked at as a whole (Crossley et al., 2007; Halbeslaben & Wheeler, 2008; Mitchell et al., 2001; Ng & Feldman, 2010).

Turnover researchers originally combined on-the-job embeddedness with off-the-job embeddedness or community embeddedness that examines family, social, and other ties to the local community. There is a question, however, about whether these two types of embeddedness work in concert or have distinct effects on turnover and other employee outcomes. Lee et al. (2004) examined off-the-job embeddedness versus on-the-job embeddedness and found that each type had different consequences. Off-the-job embeddedness predicted turnover and absence while on-the-job embeddedness did not. In contrast, Giosan, Holtom, and Watson (2005) found that on-the-job embeddedness was a significant predictor of voluntary turnover as well as performance. Additionally, Halbeslaben and Wheeler (2008) found that after controlling for satisfaction and commitment, on-the-job

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<sup>1</sup> Measures are typically reflective; the items are all highly correlated and *reflective* of the construct they represent. However, formative measures are becoming more widespread. Formative measures are not necessarily reflective of the construct but they “cause” the construct. For example, owning a home, being married, and a spouse working outside the home are causes of job embeddedness. However, job embeddedness will not necessarily cause one to get married or buy a house. These formative measures are not accurately assessed with CFA's. For a complete review, see MacKenzie, Podsakoff and Jarvis (2005).

embeddedness was a significant predictor of turnover. However, those researchers only measured on-the-job embeddedness and noted that off-the-job embeddedness might be an important factor not considered. Other researchers continue to measure on-the-job and off-the-job embeddedness as an aggregate construct that includes both work and non-work factors (Crossley et al., 2007; Felts, Mitchell, Hekman, Lee, Holtom & Harman, 2009; Holtom & Inderrieden, 2006). These conflicting findings would indicate that dimensions of job embeddedness can exhibit differential effects at times. Mitchell et al. (2001) also suggested this idea, stating that different dimensions of job embeddedness would be more crucial in some situations and outcomes than in others. However, their intended focus was the combined forces that cause an employee to remain with the organization.

Understanding the totality of forces idea that Mitchell et al. (2001) promote, Crossley et al. (2007) suggested that a composite measure weighting different dimensions equally such as the one developed by Mitchell et al. (2001) might not be appropriate, that the whole might not equal the sum of its parts. In other words, a composite multi-dimensional measure (on-the-job, off-the-job) might not accurately portray the concept of job embeddedness. Crossley et al. suggest, instead, a uni-dimensional measure general in nature that allows the participant to consider all the dimensions and facets included. This measure allows participants to place less weight on less crucial dimensions and facets and more weight on those that are important at the time while still considering all dimensions and facets. Instead of asking questions related to six specific dimensions (on-the-job and off-the-job fit, links and sacrifice), the measure asks the respondent to consider their community (family, church, recreation, etc.) and work factors in answering global questions about their attachment to the organization. A few researchers (Holtom, Crossley, & Burton, 2010; Ng & Feldman, 2010) recently have agreed with this position and have utilized the global scale developed and validated by Crossley et al. (2007) in measuring job embeddedness. However, because the Mitchell et al. (2001) scale assesses specific critical aspects of job embeddedness (such as number of associates, number or work

groups) and specifically measures fit, links, and sacrifice, many researchers continue to use the Mitchell et al. (2001) scale or scales adapted from it (e.g., Ramesh & Gelfand, 2010; Swider, Boswell, & Zimmerman, 2011; Wheeler, Harris, & Harvey, 2010). Additionally, since some research has found that the organizational dimension is the best predictor of outcomes related to the organization when relocation is not involved (Allen, 2006; Lee et al., 2004), many researchers choose to focus only on that dimension (Halbislaben & Wheeler, 2008; Harris, Wheeler, & Kacmar, 2011; Ng & Feldman, 2009; Sekiguchi, et al., 2008). The current research similarly focuses attention on organizational-related job embeddedness and utilizes only organizational-related items to assess job embeddedness.

Previously, job embeddedness literature has demonstrated that job embeddedness does lead to reduced turnover (Allen, 2006; Halbislaben & Wheeler, 2008; Lee et al., 2004; Mitchell et al., 2001). However, previous research has not considered that employees might view their job embeddedness as either positive or negative, leading to different outcomes. Turnover will be reduced, regardless of whether employees perceive the situation as positive or negative. If employees are embedded, they will remain with the employer regardless.

Human capital and social capital, on the other hand, are important outcomes that may be affected by the subjective interpretation of job embeddedness. They are examined in this current study for various reasons. First, human capital and social capital are important to organizations and their success (Adler & Kwon, 2002; Becker, 1962, 1964; Burt 1992; Coleman, 1988; Leana & Van Buren, 1999; Pil & Leana, 2009). Second, human capital can be broken down farther into specific human capital and general social capital. Social capital can be broken into internal social capital and external social capital. While existing theory and research suggest that people who are embedded in their jobs will develop human capital and social capital, the components of that capital (internal versus external, specific versus general) will be different depending on whether employees seek to strengthen or weaken their ties to the organization. Since human capital and social capital have these components, they can be used



to research how job embedded employees might behave differently based on their identification with the organization.

## 2.2 Breaking Down Human Capital and Social Capital

The term “capital” is used by researchers and organizations to represent resources that can be used to further an individual or the organization. Many think of capital as viewed from an economics or finance perspective which refers to physical capital (e.g., equipment, technology) or financial capital (holdings, cash, etc.). However, many resources besides these exist which can be used by an organization or the individual (Barney, 1991) including human capital (Becker, 1962) and social capital (Coleman, 1990; Leana & Van Buren, 1999). From an organizational standpoint, capital would be a resource for them to utilize in operations and would be referred to as organizational level capital (i.e., an organization’s human capital; see Barney, 1991). On the other hand, there is individual level capital, the capital an individual possesses to utilize within the organization. For example, individuals’ human capital would refer to their knowledge, skills, abilities and other qualities they had (Becker, 1962). In this current research, I am looking at capital at an individual level.

### *2.2.1. Human Capital*

Human capital theory (Becker, 1962, 1964) suggests that individuals possess various and different knowledge, skills, abilities, and other qualities that can be used in the successful completion of their job-related tasks. Human capital factors such as education, specialized training, job experience and aptitude help determine the degree to which employees can satisfy specific work requirements. Increased human capital is much sought after by organizations in the same way that they desire to increase other types of capital, i.e., social capital, physical capital, and financial capital (Leana & Van Buren, 1999).

Human capital outcomes have been researched extensively and been demonstrated to be a predictor of individual performance (Pil & Leana, 2009), team and firm performance (Harris & McMahan, 2008), compensation (Combs & Skill, 2003), voluntary turnover (Benson, Finegold,

& Mohrman, 2004), information accuracy (Preuss, 1997), reduced financial costs (Mathieu & Leonard, 1987), promotability, salary progression, and career satisfaction (Wayne, Liden, Kraimer & Graf, 1999) to name a few. However, predictors of human capital have been much less studied. A notable exception is Ng and Feldman's (2010) study on long-term managers that linked job embeddedness to human capital development. Contrary to expectations, the researchers found an initial negative relationship between job embeddedness and human capital development. They suggested that managers who were highly job embedded were comfortable in their roles and had little motivation to increase their human capital.

#### 2.2.1.1 Specific and General Human Capital

Becker (1964) discussed two types of human capital: general human capital and specific human capital. General human capital refers to knowledge, skills, and abilities easily transferred to other organizations such as education, general knowledge of the tasks involved, or previous experience in performing the required tasks. On the other hand, specific capital refers to knowledge, skills, and abilities that are unique and valuable, not easily transferrable, and with little value to other organizations. Many times the training that one receives on-the-job might not be considered entirely specific, as some of its aspects might be useable in another organization. However, it might not be considered entirely general either if it increases the chance for employee performance more in the current organization than it would in another. In these cases where the current organization benefits more than would others, the human capital would still be considered specific (Becker, 1964). Examples of specific human capital include knowledge of specialized work processes and procedures or of technology specific to the organization while general human capital could be exemplified in educational degrees or overall work experience (Barney & Wright, 1998).

General and specific human capital have an important relationship to turnover and mobility of employees. For example, if an organization trains its employees heavily in areas that are specific to the organization, then the employees' specific human capital increases, thus

making them more valuable to the current firm while not increasing the employees' value to other firms. This specific human capital gives employees more incentive to remain with the current organization (Becker, 1964) since they are more marketable within the organization and marketability outside the organization has not increased. On the other hand, increasing general human capital in employees can make an employee more marketable outside of the organization and increases the external mobility of the individual. Increasing this type of capital benefits the current organization but also benefits other organizations if the employee decides to leave. Thus, from an employee's perspective that wants to remain with the organization, developing both specific and general human capital will increase one's value to the organization. However, increasing specific human capital may be of the most importance for these individuals because the greater amount of specific human capital individuals possess, the more costly it will be to replace them (Becker, 1964) and the more mobile within the organization they will become.

Although the importance of human capital to an organization has been demonstrated, it is not the sole resource that is relied upon to further an organization. In fact, some researchers (Burt, 1997; Lester, Hillman, Zardkoohi, & Canella, 2008) suggest that human capital is pointless unless there are social capital situations available where it can be utilized.

### *2.2.2. Social Capital*

Social capital within an organization refers to an asset embedded in the structure of social relations, a network of interpersonal relationships both formal and informal that provide value for the individual and the organization (Coleman, 1990; Leana & Van Buren, 1999; Oh, Labianca & Chung, 2006). Mitchell et al. (2001) suggested that social capital was an important part of job embeddedness in that individuals with many ties to others in the organization and community (friends, work associates, supervisors, etc.) would be more embedded in their jobs than those with less social capital. They further suggested that social capital had a reciprocating relationship with job embeddedness such that as social ties at work and in the community

increased, job embeddedness increased (Holtom et al., 2006; Mitchell et al., 2001). This might lead one to question whether links and social capital are the same thing or different.

Social capital and links would appear to be related to each other, raising the potential for conceptual overlap, yet I would argue that they are independent constructs. First, as stated in embeddedness literature, links are connections between people, activities, and institutions both at work and away from work (Mitchell et al., 2001). Social capital, on the other hand, is more than links. For social capital to exist, a social exchange has to occur (Adler & Kwon, 2002). Adler & Kwon (2002) refer to social capital as resources that are available for people to use resulting from their social relationships. They point out that it is the product of a social exchange process that emerges over time. It is based on an exchange of "gifts" or "favors" (Adler & Kwon, 2002; 18). For example, when you do something for me, I owe you a favor and will return that favor in the future. Because we interact through the process of doing our work, we become friends and thus, are willing to do favors for each other.

Secondly, links are ties to other people, activities, and institutions. They provide the means and opportunity to develop social capital (Ng & Feldman, 2010), but are not inherently social capital. There is a difference between simply having links to many activities, people, institutions, and actually having developed social capital. For example, an employee may have ties to many employees at work, they may be involved in committees, projects, etc., that help to tie them to the job (thus, part of embeddedness), but that is different from putting effort into developing networks of well connected and influential people, different from having networks that you use to "make things happen." That is why I would argue that embeddedness (fit, links, sacrifice) should predict social capital, but is not the same as social capital.

Third, the measure of links includes things such as the number of coworkers that are dependent on you, how many you interact with, work teams you are on, if you own a home, if you are married, and whether your spouse works or not. The social capital measure, on the other hand, looks not only at how well connected you are but also how you use those

connections for making things happen at work and utilizing your networks for support. Finally, links are only one piece of the embeddedness construct -- fit and sacrifice also play roles in embeddedness, which will help with the distinctions.

Social capital has been found to have important outcomes such as performance (Pil & Leana, 2009), group or team effectiveness (Oh, Chung & Labianca, 2004), turnover (Krackhardt & Hanson, 1993), salary, promotion, career satisfaction (Seibert, Kraimer, & Liden, 2001), career success (Burt, 1992; Seibert et al., 2001), knowledge transfer (Inkpen & Tsang, 2005), job search and acquisition (Granovetter, 1995), and intellectual capital (Nahapiet & Ghoshal, 1998). As with human capital, the predictors of social capital are less studied. In a review, Adler and Kwon (2002) listed a few predictors from limited studies including organization structure, size, actor similarity, attitude similarity, cognitive and structural factors, rule of law, type of political regime, legal framework, level of participation in the policy process, and the level of political decentralization. Ng and Feldman (2010) also contributed to this research finding that job embeddedness was positively related to social capital development behavior, but that this behavior decreased over time.

#### 2.2.2.1 Internal and External Social Capital

Social capital may be internal or external though researchers seldom look at them separately. Internal social capital refers to the network of contacts and relationships that an individual has with others inside the organization such as with supervisors, coworkers and management. On the other hand, external social capital refers to the networks that one builds outside of the organization such as vendors and other resource providers as well as occupational colleagues and professionals (Leana & Pil, 2006; Ng & Feldman, 2010).

Internal social capital is important for individuals to possess as it helps them improve their everyday work. For example, knowing who to go to for help with a typical problem, knowing the correct people to approach to support a new project, or having the contacts necessary to provide accurate advice on mobility within the organization are all examples of

important internal social capital. Additionally, internal social capital increases functionality, cohesion, and communication within the organization (Ng & Feldman, 2010).

External social capital benefits the organization also in that the contacts and relationships that employees have with suppliers of goods and services are a critical resource to the organization (Leana & Pil, 2006). External social capital is also important for individuals but for different reasons. For example, research has shown that external social capital is a primary source for career progression and job attainment (Lin & Dumin, 1986) such that individuals utilize social ties (friends, colleagues) outside of the organization to locate other employment that is more suitable to their current situations.

Internal social capital has been positively related to both employee job performance and organizational performance (Pil & Leana, 2009; Thompson, 2005) while it seems that external social capital has been positively related to organizational performance only (Leana & Pil, 2006). Both internal and external social capitals are outcomes of job embeddedness (Ng & Feldman, 2010), but few other studies exist separating out internal and external social capital the way it is defined here.

Together, the literature on specific and general human capital and on internal and external social capital suggests that employees can direct their skill development and the development of their social ties either within the organization or outside the organization. This is important because job embedded employees may choose to develop one type of capital over another depending on whether they perceive their job embeddedness as positive or negative.

### *2.2.3 Disentangling Differential Effects for Job Embeddedness*

In fact, researchers have recently begun to extend the outcomes of job embeddedness to human capital and social capital and suggested that the outcomes of job embeddedness might not be universally positive. For example, Crossley et al. (2007) suggested that being embedded in jobs that individuals find no pleasure in might be a downside to job embeddedness. That is, people may stay with their organization even though they may be

dissatisfied with their current job because of what they would have to give up to leave (Crossley et al., 2007; Ng & Feldman, 2009; Ng & Feldman, 2010). If employees feel embedded because they fit well in their community, have friends and family that make it difficult to change locations, or have large pension benefits, then they might remain with their employers even if they are not satisfied in their current job situations. In these cases, employees might be prone to “lose motivation, experience frustration, and even engage in counterproductive workplace behaviors” (Crossley et al., 2007; 1041).

While job embeddedness might reduce turnover, the other outcomes associated with job embeddedness are likely to depend on whether employees view their job embeddedness subjectively as either positive or negative. If employees enjoy their work, have a good fit with the organization, many positive social links, and friends and coworkers in the workplace, then these employees are likely to view their job embeddedness in a positive light. These employees would likely be highly engaged and would positively benefit the organization. In fact, research has found job embeddedness to have positive outcomes including performance, organizational citizenship behaviors (OCB), reduced voluntary turnover and absenteeism (Halbesleben & Wheeler, 2008; Holtom & Inderrieden, 2006; Lee et al., 2004; Mallol, Holtom, & Lee, 2007; Mitchell, et al., 2001; Wijayanto & Kismono, 2004).

If employees’ subjectively view their employment situation as negative, however, they will feel they are embedded in jobs because of being “stuck” there when there is a desire to be doing something else. Individuals may dislike their current job situation and might leave if it were possible, but they stay because they are embedded and, hence, tied to a job they find no pleasure or meaning in. In these situations, organizations may still see less voluntary turnover, yet employees may find it difficult to maintain motivation, becoming less satisfied, less contented, and might possibly act out in counterproductive ways (Crossley et al., 2007; Ng & Feldman, 2009; Ng & Feldman, 2010).

For example, Sekiguchi et al. (2008) found indirect negative effects in their research into job embeddedness as a moderator in performance relationships. Specifically, they found that high levels of job embeddedness in an organization when not accompanied by good leader-member exchange (LMX) and/or organization-based self-esteem (OBSE) could have a negative impact on performance. In other words, when employees were highly embedded, they were likely to exhibit organizational citizenship behaviors and have increased task performance as long as there was good LMX and/or OBSE as well. If there was less LMX and/or OBSE, then performance decreased for those who were highly embedded. According to the authors, this finding demonstrated there was a positive and negative emphasis for job embeddedness. When LMX was high, then highly embedded employees would see their job embeddedness as providing additional resources and perform better. However, when LMX was low, then employees would be highly embedded in an unfavorable situation resulting in poorer performance.

Recently, Ng and Feldman (2010) were among the first to test the idea that job embeddedness can have direct negative outcomes. They found that although managers who were highly embedded did initially develop additional internal and external social capital, the development of internal social capital decreased over time, suggesting that managers who are highly embedded may actually lose interest in continuing to build additional social capital within the organization. It is important to note, however, that the development of social capital outside of the organization seemed to be unaffected.

Taken together, the existing research on job embeddedness suggests that the employee may not always view job embeddedness positively. I suggest that these contrasting findings can be reconciled by taking into account the ways in which employees might view their embedded situation. That is, I argue that a state of job embeddedness can be interpreted differentially by individuals based on how they subjectively identify with their current job and organization. Research has demonstrated that identity can have an impact on the way people



perceive their work situations (Lobel & St. Clair, 1992; Ng & Feldman, 2008; Tyler & Blader, 2001) and, thus, may impact the relationship that job embeddedness has on outcomes such as human capital and social capital.

### 2.3 Identity Theory

In the current study, identity is defined as the meaning that an individual ascribes to one's self that helps to define who the person is in relation to various roles or groups (Burke, 2004). Identity has been researched from different perspectives, and there is not a consensus definition across researchers (Ashmore, Deaux, & McLaughlin-Volpe, 2004). However, the majority of identity literature is based on one of two theories: role identity theory (Burke & Reitze, 1981; McCall & Simmons, 1978; Stryker, 1968; Stryker, 1980), and social identity theory (Ashforth & Mael, 1989; Hogg & Abrams, 1988; Tajfel, 1978, 1981). Both theories have similar concepts and ideas that overlap (Stets & Burke, 2000) but also important distinctions.

Social identity theory suggests that individuals will place themselves and others into categories or groups that they feel a part of (e.g., race, gender, religious affiliation, organizational membership). They "identify" with these groups such that when something happens to the group, the individuals see it as happening to themselves, a reflection on their own person (Mael & Ashforth, 1992). A key idea in social identity theory is that this categorization occurs partially because of individuals' desire to build self-esteem, to enhance their self-concept by being associated with a group that will help them see themselves in a more positive manner (Ashforth & Mael, 1989; Ashforth, Harrison, & Corley, 2008). Furthermore, Ashforth et al. (2008) point out that this desire to improve the perception of self is expressed two ways: the realization of a positive identity as well as the development of self to more fully represent that identity.

Role identity theory is different in that it focuses on the roles that people play in their personal and professional lives as the source of individual identity. Role identity theory utilizes the idea of self-categorization as well. However, role identity theory focuses on the roles that

people categorize themselves in. Within these roles there is an understanding of what is expected, which serves as a rule of thumb to steer behavior (Stets & Burke, 2000).

Researchers agree that social identity and role identity theory are similar frameworks using different linguistics and slightly different focuses. For example, Ashmore et al. (2004) more clearly define identity and created a framework integrating the two schools of thought. They define a collective identity as an identity that an individual shares with others who have similar characteristics (e.g., ethnicity, religion, or occupation). They acknowledge that a person's individual roles or personal identities are important, but see these as part of the larger collective identity. Moreover, they suggest that the importance or salience that a person attaches to a particular identity is also included as part of the collective identity. This salience element is based on the idea of particular identities such as religious identity, organizational identity or family identity having varying levels of salience in an individual's life but which can operate simultaneously. However, an identity with stronger salience or importance should have a stronger impact on outcomes. Context also plays an important role in this scenario. Whether or not to draw on a particular collective identity will depend on the context of the particular situation (Ashmore et al., 2004).

Stets and Burke (2000: 224) also agree that social identity theory and role identity theory are similar. They suggest that there is "substantial overlap" between the two theories and that eventually the two theories will merge and become one. Burke (2004; 5), a main contributor to role identity theory, stated "whether social structure is conceived as positions (roles and group memberships) to which identities are tied, or as the human organization of resource flows and transfers that are controlled by the identity verification process, identities and social structure are two sides of the same coin."

### *2.3.1. Identity Salience*

Bagger et al. (2008) suggested that any time individuals place importance on one of their social roles (i.e., family, work, career), then that role becomes a part of their individual

identity. Since the salient roles that one occupies is an important factor in one's identity, an individual who holds work-related roles (e.g., occupation, organization) as highly salient, to the extent that it helps to define who the person is, will identify with those roles (Burke, 2004). Thus, individuals who identify with their organization would find their role in the organization to be extremely important and a salient part of life.

Identity researchers have demonstrated that individuals have multiple identities, hierarchical in nature, each with varying levels of salience. Specific to the organization, Ashforth and Mael (1989: 22) stated, "the organizationally situated social identity may, in fact, be comprised of more or less disparate and loosely coupled identities." The more important a particular identity is to a person, the more that person is willing to invest in that identity in order to develop and substantiate it (Ashforth & Mael, 1989; Burke, 2003; Powell & Greenhaus, 2010; Stryker 1968, 1980). Thus, when a work identity or an organizational identity is highly salient to an individual, he/she is likely to spend more time and energy in work (Lobel, 1991; Lobel & St. Clair, 1992; Powell & Greenhaus, 2010).

### *2.3.2. Organizational Identification*

Organizational identification is typically defined from a social identity theory perspective. From this perspective, organizational identification expresses the meaning people give to themselves in terms of membership in a particular organization (Mael & Ashforth, 1995). A person with a strong organizational identification will see the successes and failures of the organization as his/her own. When the organization is insulted, the individual will take it personally and feel as if he/she were insulted. There is a feeling of oneness or belongingness with the organization (Ashforth & Mael, 1989; Mael & Ashforth, 1992).

Ashforth and Mael (1989) laid out specific components of identifying with an organization which were related to the organization itself. First, the distinctiveness of an organization's values and practices that separates it from other similar organizations would likely increase the potential for an individual to identify with an organization. Mael and Ashforth

(1992) provided evidence of this identification in a sample of college alumni. They found that the distinctiveness of the alumni's college was positively related to their identification with that organization. Thus, individuals who work for organizations who are distinct in some manner (e.g., religious organization, unique service or product) from comparable organizations have much potential to identify with their organizations.

Secondly, an organization having much prestige increases the opportunity for employees to identify with them. Being associated with a prestigious organization can build pride in individuals and lead to increased organizational identification. Todd and Harris (2009) found that among salespeople who worked for professional sports teams, individuals perceiving their teams as being prestigious were significantly and positively related to pride and organizational identification. Thirdly, they suggested that the salience of out-groups could build organizational identification. For example, many of us as individuals are proud of where we went to school and we identify ourselves with those institutions. Research demonstrates that competition between schools creates an organizational identification with one's alma mater (Mael & Ashforth, 1992).

Research demonstrates that in addition to organizational factors that are important to increasing identification, individual factors are important as well. For example, Mael and Ashforth (1992) demonstrated that the sentimentality of college alumni was positively related to organizational identification. In a study of veterinarians, Johnson et al. (2006) demonstrated that the ownership status (owner/partner or associate) of individuals was positively related to organizational identification. Cable and DeRue (2002) found that person-organizational fit was a positive predictor of organizational identification. Other individual related factors include biodata such as intellectual/achievement orientation or being a solid citizen (Mael & Ashforth, 1995), the need for affiliation (Wiesenfeld, Raghuram, & Garud, 2001), organizational tenure (Riketta, 2005), gender (Lucas, 1997), and collectivism (Gundlach, Zivnuska, & Stoner, 2006).

According to Ashforth and Mael (1989), from a social identity theory perspective, there are three broad areas of organizational identification outcomes. First, individuals will tend to behave in a manner that is in alignment with and that reinforces identities important to them and leads to their support of the organizations that exemplify those identities. Mael and Ashforth (1995) demonstrated this outcome, finding that college alumni were more likely to contribute to, recommend and support their alma maters when the alumni identified with those particular organizations.

Secondly, outcomes such as cohesion, cooperation, altruism, and positive evaluations that are normally associated with the formation of groups will be affected by organizational identification (Ashforth & Mael, 1989; Turner, 1982; Turner, 1984). For example, Bartel (2001) found that a strong organizational identification was positively related to (1) cooperation, in assisting others both at a personal and work level, (2) work effort, following the rules, procedures and policies set by the organization, and the amount of energy expended on behalf of the organization, and (3) advocacy participation, suggesting innovation, maintaining high standards and advocating change.

Lastly, Ashmore and Mael (1989) suggested that identifying with the organization will enhance the underlying tenets of identification. In other words, as organizational identification becomes stronger in an individual, the values and practices making an organization distinct, for example, may become more salient to the individual, and the perception of group prestige may increase.

In recent reviews (Ashforth et al., 2008; Haslam, 2004; Haslam & Ellemers, 2005; van Dick, 2004), numerous outcomes of organizational identification have been identified including turnover and intent to turnover (Mael & Ashforth, 1995; Riketta, 2005; Tyler & Blader, 2001; van Dick et al., 2004), job satisfaction (Efraty & Wolfe, 1988; Riketta, 2005), in-role behavior and extra-role behavior (Riketta, 2005; Tyler & Bladder, 2001), compliance with organizational norms (Ouwkerk, Ellemers, & De Gilder, 1999; Tyler & Blader, 2001), task performance and

intrinsic motivation (van Knippenberg, 2000), coordinated action and decision making relevant to the organization (Cheney, 1983; Tyler, 1999), willingness to exert effort (Efraty & Wolfe, 1988; van Knippenberg, 2000), alienation (negatively related), task involvement and performance effectiveness (Efraty & Wolfe, 1988), financial contribution and organizational support, participation (Mael & Ashforth, 1992), defending the organization (Edwards, 2005; Tyler, 1999), and hours worked (Ng & Feldman, 2008).

Ashforth et al. (2008) noted there exists a vast number of supported relationships with organizational identification, but important questions remain unanswered. As an example, they suggested that many early organizational identification studies are really looking at organizational commitment or job satisfaction and fail to consider the differentiating factors of organizational identification, which leads to the question of how organizational commitment is different from organizational identification.

#### 2.3.2.1 Organizational Commitment and Organizational Identification

Mowday et al. (1979; 226) defined commitment as “the relative strength of an individual’s identification with and involvement in a particular organization.” Allen and Meyer (1990) tested a three-component model of commitment that included affective commitment (employee emotional attachment to the organization: “I want to stay”), continuance commitment (based on profit of staying and costs of leaving the organization: “I have too much invested to leave”) and normative commitment (perceptions of obligations to stay with the organization: “I have a contract to stay”). Based on this model, there is an emotional attachment component, an identification component and a willingness to be involved with the organization resulting in an overall positive attitude toward the organization (Ashforth et al., 2008). Organizational identification, on the other hand, refers to the individual being one with the organization, an extension of it.

One of the key propositions of social identity theory is that individuals associate themselves with a group in an effort to enhance self-concept; they include that membership as

part of their self-concept to accomplish this enhancement. As such, both have some similar concepts but are defined differently (Ashforth et al., 2008; Ashforth & Mael, 1989; Meyer, Becker, & van Dick, 2006). Mael and Ashforth (1992) further distinguished organizational commitment and organizational identification by looking at the Organizational Commitment Questionnaire (OCQ) that was often used as a measure. They suggested that the questionnaire assesses “(1) belief in and acceptance of the organization's goals and values, (2) willingness to exert effort on behalf of the organization, and (3) desire to maintain membership” (Mael & Ashforth, 1992; 105). The authors indicated that this view took in similar factors such as internalization and affect, but that organizational identification from the social identity theory perspective was not included in this definition of commitment. Furthermore, there is some evidence that organizational identity may be an antecedent of commitment (Meyer et al., 2006). For example, Foreman and Whetten (2002) found empirical evidence demonstrating that the interaction between an employee's perception of the organization's identity and the degree of his/her identification predicted affective commitment. Together, these studies provide evidence to support the notion that organizational commitment and organizational identity are indeed separate and independent of each other, and, recently, numerous researchers have demonstrated this premise (Ashforth et al., 2008; Ashforth & Mael, 1989; Cole & Bruch, 2006; Kreiner & Ashforth, 2004; Mael & Ashforth, 1992; 1995; Meyer et al., 2006; Riketta, 2005), leaving much work to do in exploring relationships while ensuring the future viability of the construct (Ashforth et al., 2008).

### *2.3.3. Organizational Disidentification*

Recent research has suggested that there are other ways that people might give meaning to themselves in terms of their membership in an organization (Kreiner & Ashforth, 2004). One such condition is disidentification (Dukerich, Kramer & McLean Parks, 1998; Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004) where employees define themselves as not being at one with the organization, not having the same beliefs, values, principles and

attributes that the organization has, and, thus, they are not the same as the organization. Individuals who disidentify with their organizations may feel so strongly about the differences in their values, beliefs, or other characteristics that define those organizations that they intentionally try to separate their own identities from the organization. Often times these individuals do not want others to know who their employers are, and they have no issues with stating their opinions about the differences they find between themselves and the organization. They try to draw a distinct line between themselves and the organization and aspects that are disagreeable to them (Kreiner & Ashforth, 2004).

Identification and disidentification are not simply opposites of each other, two extremes on either end of a spectrum (Elsback & Bhattacharya, 2001; Kreiner & Ashforth, 2004). It may seem that they are the antithesis of each other and merely two ends of the same spectrum. However, they are separate entities. They are similar to each other in that they both help to define an individual in relation to the organization (Elsback & Bhattacharya, 2001), and they are both used to try to maintain an individual's positive self-image (Kreiner & Ashforth, 2004). However, there are also differences. With organizational identification, individuals seek to associate themselves with the positive aspects of the organization while individuals who disidentify with their organizations are seeking to disassociate themselves from negative aspects of the organization. Individuals who identify with their organizations may do so in whole or in part. They may identify at different levels with some things while being indifferent to others (Kreiner & Ashforth, 2004). For example, an employee may identify with the overall mission and goals of an organization but are indifferent to the policies and procedures used to achieve those goals, thus not identifying completely. Elsbach & Bhattacharya (2001) note that when individuals disidentify with an organization, it is a complete separation; the individuals go to the extreme in their perception that they are not the same as the organization. There is no integration of the identity of the organization and the identity of the individual. They do not conceptually exist together. Thus, with identification there may be some overlap whereas with



disidentification, there is not. From an empirical perspective, though disidentification and identification are negatively correlated (Kreiner & Ashforth, 2004), they are not exact opposites (Elsbach & Bhattacharya, 2001).

When individuals identify with an organization, they will normally associate positive characteristics of the organization to themselves. On the other hand, if they disidentify with the organization, they will normally perceive that organization's characteristics as negative and will attempt to separate themselves from them (Kreiner & Ashforth, 2004). Kreiner and Ashforth (2004) found that disidentification was positively associated with antecedents such as negative affectivity, cynicism and psychological contract breach, but that it did not necessarily lead to turnover. They noted that disidentification would be perceived by employers as undesirable in their employees, but that employees who disidentify with their organizations remain with them for various other reasons which can lead to managers dealing with employees with negative views of the organization. These employees may be embedded in their jobs but in an unfavorable work situation.

## CHAPTER 3

### HYPOTHESIS DEVELOPMENT

#### 3.1 The Role of Job Embeddedness with Human and Social Capital

Job embeddedness theory (Mitchell et al., 2001) suggests that employees who are embedded should have additional opportunities to build human capital and social capital, and that human capital and social capital may be a natural by-product of being job embedded. People who have a good fit with their organization and/or the community and environment they are in are also likely to have many rich formal and informal ties to others at work and knowledge of development opportunities. From this perspective job embeddedness should result in the development of human and social capital for several reasons.

First, if people have a good fit with their job, their skills are a good match, then that will provide additional ways for them to learn on the job (e.g., increased job expertise, increased chances to attend conferences or seminars, etc.) and further increase human capital. Second, if individuals have many links in the organization, then they know many people who they talk to and work with on a daily basis. Social capital will naturally result from these links because they provide opportunity to produce more links, and the more links people have, the more opportunity they have to obtain additional links (Mitchell et al., 2001). Thus, individuals with many social links and who are well networked are positioned to take advantage of opportunities as well as creating their own opportunities to leverage their individual resources (Pfeffer, 1992). The nature of job fit and social links is such that human capital and social capital should increase (Holtom et al., 2006). Third, previous empirical literature has demonstrated that a relationship between job embeddedness, human capital and social capital does exist (Holtom et al., 2006; Mitchell et al., 2001; Ng & Feldman, 2010). Ng and Feldman (2010) found that job embeddedness was positively related to human capital and social capital. Drawing off of job

embeddedness theory and past empirical evidence, highly embedded employees should have high levels of individual resources such as human capital and social capital. Therefore:

*Hypothesis 1a: Job embeddedness (on-the-job) is positively related to specific human capital.*

*Hypothesis 1b: Job embeddedness (on-the-job) is positively related to general human capital.*

*Hypothesis 2a: Job embeddedness (on-the-job) is positively related to internal social capital.*

*Hypothesis 2b: Job embeddedness (on-the-job) is positively related to external social capital.*

In keeping with current theory and research on job embeddedness, Hypotheses 1 and 2 suggest that job embeddedness in general will promote the development of human capital and social capital simply due to the fact that an embedded individual will have greater opportunities for professional development and social interaction than less embedded counterparts. The remaining hypotheses, however, develop a new extension of job embeddedness theory premised on the notion that employees interpret job embeddedness differently based on organizational identification and will be motivated to develop different types of human capital and social capital as a result.

### 3.2 The Role of Organizational Identification

I contend that job embeddedness is an objective situation that is subjectively viewed by employees through the lens of their organizational identification. Furthermore, organizational identification will determine whether employees view their job embeddedness in a positive or negative framing and seek to either deepen their ties or find ways to leave the organization. Specifically, organizational identification should determine whether embedded individuals seek human and social capital that either furthers their careers internally or provides an exit strategy that allows them to further their careers externally. While embedded individuals will have additional opportunities to develop human capital and social capital in general, I suggest, based on identity theory, that employees will seek different kinds of human capital and social capital

depending on how they view their job embeddedness. To support this point, a brief discussion of general versus specific human capital and internal versus external social capital in relation to job embedded individuals is necessary.

General human capital, such as education, improves the marketability of employees to the extent that they may leave the organization (Benson et al., 2004). Additionally, general human capital development is often externally focused, such as when employees may seek additional education or graduate degree through tuition-reimbursement. Specific human capital, on the other hand, is organization specific. It is often gained from learning within the organization and gives an organization a sustained competitive advantage over its competitors (Hatch & Dyer, 2004). Developing general human capital would likely be perceived as making one more marketable to other organizations (external) whereas developing specific human capital would be perceived as being less marketable externally but more highly marketable internally (internal). In fact, Sekiguchi (2007) suggested that specific human capital is attractive to individuals who do not wish to leave their organizations, and employees who identify with their organization will be motivated to increase this resource. Developing new general human capital, however, can increase motivation to leave the organization if employees feel that they are not recognized or rewarded for their new skills (Benson et al., 2004).

Social capital has a similar distinction as human capital in that it is either internal or externally focused social capital (Adler & Kwon, 2002). Individuals' internal social capital in the network of contacts and relationships they have with others inside the organization allows them to successfully navigate problems that arise, find support from other departments and gain information critical to success on the job (Pearce & Randel, 2004). Internal social capital also increases functionality, cohesion, and communication within the organization, thereby benefiting the organization as well as the individual (Ng & Feldman, 2010). However, external social capital also is important to the organization. For example, relationships with vendors and

partners are critical in obtaining necessary resources for the organization and providing information that may not be available internally (Leana & Pil, 2006).

Because human capital and social capital can be focused either internally or externally, employees who are embedded in their jobs and identify with the organization are likely to direct more of their efforts on developing social capital within the firm for various reasons. First, job embedded employees who identify with their organizations are not likely to be interested in leaving; rather, they would like to enhance their value to the current firm to solidify their employment. Internal social capital increases cohesion, functionality and communication within the organization (Ng & Feldman, 2010). Thus, internal social capital is likely to be perceived as beneficial in maintaining an individual's employability within the organization. Second, in general, individuals seek upward mobility (Rosenbaum, 1984). In other words, most employees would prefer not to be stagnant; instead, they like to improve themselves, better their performance and contribute to the organization's improvement and success. In the case where an individual is job embedded and not seeking mobility outside the organization, upward mobility would be best afforded through learning skills, processes and procedures that are specific to and funded by the organization, thereby increasing his/her value to the organization. Third, internal social capital is important to organizations because it creates competitive advantage through knowledge transfer and information sharing as well as shared trust, increasing cooperation, mutual accountability and performance (Leana & Pil, 2006). Onyx and Bullen (2000) note that trust is an element in social capital that extends from knowing that the other party will act as expected and in alignment with one's own goals and values. These employees understand and accept what the organization's mission is, and their actions reflect this mission to the extent that they are not just representing the organization but themselves (DiSanza & Bullis, 1999). Ashforth and Mael (1989) stated that individuals who identify with the organization, understand and internalize the organization's mission, goals and values and sees them as their own and aligns their behavior with the organization (Ashforth & Mael, 1989).

Therefore, employees who are highly job embedded and who identify with the organization will be likely to seek high levels of internal social capital.

To summarize, highly embedded individuals in an effort to enhance intra-organizational careers and to affirm their organizational identification will build both specific human capital and internal social capital. Thus, highly job embedded individuals that identify with their organizations should have higher levels of specific human capital and internal social capital.

Therefore, I hypothesize the following:

*Hypothesis 3: The relationship between job embeddedness and internal social capital is moderated by organizational identification such that as organizational identification increases, there is a stronger positive effect of job embeddedness on internal social capital.*

*Hypothesis 4: The relationship between job embeddedness and specific human capital is moderated by organizational identification such that as organizational identification increases, there is a stronger positive effect of job embeddedness on specific human capital.*

### 3.3 The Role of Organizational Disidentification

Whereas employees are likely to interpret their job embeddedness as a positive situation when they identify with the organization, they are also likely to interpret their job embeddedness as a negative situation when they disidentify with their organization. Employees who disidentify with the organization are employees who wish to separate themselves from the organization, they view themselves in opposition to the organization, and view themselves as not having the same goals, values and attributes as the organization (DiSanza & Bullis, 1999; Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004).

In general, employees who disidentify with their organizations will tend to behave in a manner that is counterproductive to the growth and success of the organization. Elsbach and Bhattacharya (2001) found that individuals who disidentify with an organization are likely to exhibit counterorganizational actions such as boycotting the products and services of the organization or supporting opposing organizations both financially and personally. Additionally, they found that disidentifiers were likely to openly criticize the organization. These individuals

do not accept or agree with the organization's mission, culture, principles or values that define the organization, do not want others to associate them with it in any way, and go as far as openly trying to discredit and damage the organization (Pratt, 2000). Moreover, they typically are high in negative affect and cynicism (Kreiner & Ashforth, 2004).

Ironically, organizational disidentification does not necessarily lead to turnover. Kreiner and Ashforth (2004) found that although these individuals are not in a favorable job situation and may wish to leave, they often remain in their organizations for extended periods of time for many reasons (e.g., poor labor market, golden handcuffs). Therefore, job embedded individuals who disidentify with their organization are likely to view their job embeddedness as a negative situation: they are stuck in a job they don't like, in an organization they don't wish to be associated with, but have no alternatives except to remain. These individuals would likely leave the organization if possible and thus seek to develop resources that will be the most marketable to other organizations.

These individuals are likely to be motivated to develop skills and professional contacts that increase their job alternatives and will actively seek to develop marketable skills and external networks as an exit strategy. These employees will prefer to develop general human capital useful across a wide range of organizations. Similarly, external social capital in the form of the individual's network of professionals and colleagues outside the organization is likely to be seen as more marketable than is internal social capital specific to the current organization. Therefore, if job embedded individuals disidentify with the organization, they will have much reason to develop general human capital and external social capital over the course of their tenure, thereby increasing their value and marketability outside the organization. Therefore I hypothesize the following:

*Hypothesis 5: The relationship between job embeddedness and general human capital is moderated by organizational disidentification such that as organizational disidentification increases, there is a stronger positive effect of job embeddedness on general human capital.*

*Hypothesis 6: The relationship between job embeddedness and external social capital is moderated by organizational disidentification such that as organizational disidentification increases, there is a stronger positive effect of job embeddedness on external social capital.*



CHAPTER 4  
METHODOLOGY

4.1 Sample

The design of this study is such that primary data were necessary. A power analysis was performed following the procedures, formulas and tables provided by Cohen and Cohen (1983) to determine the sample size that would be needed for the study. Cohen and Cohen (1983) suggested that significance criterion for the analysis of  $\alpha=.05$  and power=  $1-\beta =.80$  was acceptable for power analysis. However, to be conservative, significance criterion of  $\alpha=.01$  and power=  $1-\beta =.95$  was used. Population effect size was determined:

$$f^2 = \frac{R^2}{1 - R^2} = \frac{.10}{.90} = .1111$$

The sample size was then calculated using  $L$  tables provided by Cohen and Cohen (1983) for  $k_b$  (used to represent the number of  $df$  associated with the source of  $Y$  variance being tested), the number of independent variables being tested ( $k$ ) and effect size ( $f^2$ ).

$$n^* = \frac{L}{f^2} + k + 1 = \frac{25.76}{.1111} + 6 + 1 = 239$$

Thus, a sample size of at least 239 cases would be needed to detect significant results at an  $\alpha=.01$  and a .95 probability of rejecting the null hypothesis. The data for the study was obtained from a large hospital in the southwestern United States.

*4.1.1 Data Collection*

A total of 1353 employees, full, part-time, and PRN, were invited to respond to either a paper-based or electronic survey in early June 2011. Of these, 527 responded to Time 1 (39% response rate) with representation from various departments. These employees were invited to respond to a second paper-based or electronic survey in late July 2011. Of these, 425 responded (overall response rate of 31.4%) with 86 respondents (22.6%) using the paper-based

survey instead of electronic. Independent variables (job embeddedness), moderators (organizational identification and organizational disidentification), and demographics were collected at Time 1. The dependent variables (human capital and social capital) were collected at Time 2. ANOVA results indicated that responses for model variables were in general not significantly different for various groups within the sample ( $p < .05$ ). However, significant group differences included employment status (full-time = 77.4%, part-time = 10.8% and PRN = 11.8%) and whether the employee had managerial responsibilities (28.9%) or not. The latter was expected since managers will typically have different attitudes and behaviors, a wide range of job skills and knowledge, and many social ties they have developed which enhance their performance for management type positions.

#### *4.1.2 Procedure*

At Time 1, each hospital employee received an electronic link to a web survey hosted by Qualtrics. Additionally, a paper survey was mailed to each participant with a self-addressed, stamped return envelope which was returned to the researcher via USPS. The invitation to participate was sent via email and USPS 1<sup>st</sup> class and described the purpose of the current research, the time it would take to participate, an incentive to participate in the form of a drawing for Visa gift cards (five \$15.00, five \$20.00, one \$50.00 and one \$100.00) at the end of the data collection, an electronic link and web address for participating online (see Appendix A & B). A reminder to participate was emailed at one week and two weeks after the initial invitation was sent.

Participants who responded electronically opened up the link to the survey where an informed consent (see Appendix C) was first read and acknowledged by inputting the password sent to them. Participants responding by mail received the consent form as part of the survey. Participants responded to 144 questions which took approximately 15-20 minutes to complete. Contact information was retained for each respondent by tracking him or her through Qualtrics

for the purpose of drawing the incentive winners. The survey was open for approximately 3 weeks.

At Time 2, the respondents from Time 1 were again sent an invitation to participate via both email and USPS 1<sup>st</sup> class. These invitations can be seen in Appendix D and E. A reminder was emailed at one week and two weeks after the initial invitation to participate. Participants responded to 95 questions which took approximately 10-15 minutes to complete. Contact information was again retained for each respondent for the purpose of drawing the incentive winners. The Time 2 survey was open for approximately 3 weeks. Participants were told that only those who responded to both Time 1 and Time 2 were included in the incentive drawing.

#### *4.1.3 Sample Characteristics*

The sample was largely female (84.2%), Caucasian (80.7%), married (69.2%), with a spouse working outside the home (of those that were married 75.2%) and homeowners (73.9%). Over 61% (61.6%) had an associate degree or higher, 55.1% had clinical jobs, 30.8% had managerial duties and 55.8% had children living at home. Participants worked an average of 36.4 hours per week, had an average tenure of nine years and an average age of 44 years. Part time and PRN employees were retained as part of the sample. PRN is a category of employment used in the medical field that means “as needed.” These employees typically make slightly more money but do not have access to all benefits such as health insurance. PRN employees typically have a specific level of number of hours they are supposed to work but may work more hours than their plan. These employees work full-time hours but their schedule depends on patient load. When patient load decreases, employees that are PRN are cancelled before the permanent employees.

#### 4.2 Data Preparation

The data were inspected for responses with little variance suggesting leniency in responding, which eliminated five cases. Various respondents failed to answer some questions

leaving missing data. In order to maintain a sufficient sample size, a data imputation method was needed. Any cases that were missing more than 40% of a scale were eliminated from the sample (36 cases). After deleting these cases, the amount of missing data in each scale varied between .2 and .4% suggesting the remaining data was missing at random. An expectation-maximization (EM) algorithm (Dempster, Laird, & Rubin, 1977) imputation method in LISREL was used to impute the missing data. EM algorithm is a two-step maximum likelihood (ML) method of imputation that obtains maximum likelihood estimates for missing data (Allison, 2002). Newman (2003) performed a Monte Carlo simulation that analyzed six missing data techniques that included EM algorithm as well as listwise deletion, pairwise deletion, stochastic regression imputation, full information maximization likelihood (FIML), and multiple imputation (MI). They found that using EM algorithm as an imputation method resulted in smaller errors in parameter estimates. EM algorithm “strongly outperformed” using listwise deletion, especially in cases where there were smaller amounts of data that were missing at random (Newman, 2003; 352).

The items for the on-the-job links portion of job embeddedness were open-ended number questions (e.g., How many work teams are you on?), so were not appropriate for this type of imputation. In the 12 cases that were missing data on one of these items, the on-the-job embeddedness variable was created utilizing eight items instead of nine. Data for the three open-ended number questions that identified on-the-job links were skewed and had high kurtosis. Four cases that were more than three standard deviations from the mean were eliminated. The resulting total sample used in the analysis after deletions and imputation was 380 cases.

## 4.3 Measures

### *4.3.1 Job Embeddedness*

As mentioned previously, this dissertation focuses on organizational-related outcomes and uses only on-the-job embeddedness as the operationalization of job embeddedness rather

than including community embeddedness. First, community embeddedness (off-the-job) is strongly related to retention only when job relocation is involved (Allen, 2006). Also, research demonstrates that organizational embeddedness (on-the-job) is a better predictor of organizational outcomes such as performance and OCB than the community embeddedness (Allen, 2006; Lee et al., 2004). Further, the current research focuses on organizational-related outcomes (human and social capital) that would be less impacted by community-related items. Recently, researchers have supported using only organizational-related items of the job embeddedness measure (Halbesleben & Wheeler, 2008; Harris et al., 2011; Ng & Feldman, 2009; Sekiguchi et al., 2008). However, recognizing its potential impact, off-the-job embeddedness (Halbesleben & Wheeler, 2008; Lee et al., 2004; Mitchell et al., 2001) was included as a control variable.

Job embeddedness in the current study was assessed with an 18-item scale (9 items for on-the-job and 9 items for off-the-job) measured on a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). Job embeddedness items were adapted from a shortened job embeddedness scale which was developed and validated by Holtom, Mitchell, Lee, and Tidd (2006). In their validation study, they found a high correlation between the original job embeddedness scale and the shortened version ( $r = .92$ ). Additionally both the shortened scale and the long scale predicted turnover beyond job satisfaction and the amount of variance explained by each scale was comparable (Felps et al., 2009; Holtom et al., 2006). Thus, there is adequate convergent validity between both scales, substantiating the use of the shortened scale.

In the current research, the three dimensions of job embeddedness were separately standardized before combining to create the composite measure. The reliabilities of the composite on-the-job embeddedness and off-the-job embeddedness variables were satisfactory ( $\alpha = .83$  &  $.80$  respectively). The items are provided in Appendix F.

#### 4.3.2 Human Capital

There are very few reflective scales used in human capital research, and none have measured specific human capital versus general human capital. The current research assesses human capital using reflective measures instead of the traditional formative measures and, thus, created items specifically for this study. Five items were created to reflect general human capital including “I have skills that are marketable in a wide variety of organizations,” “my skills are broadly marketable,” “I have skills and knowledge that are highly valued in a broad range of industries,” “I have broad professional skills and knowledge,” and “I have education that would be valued by many organizations.” Five items were created to reflect specific human capital including “I have many skills that are specific to <organization name>,” “I have much knowledge that is specific to <organization name>,” “I have expertise in a specialized area that is specific to <organization name>,” “I have knowledge about policies, procedures or processes that are specific to <organization name>,” and “I have knowledge, skills and training from mentoring and/or coaching that is specific to <organization name>.” Items were measured on a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*).

Since these items were created for this study, a validation study was performed. Undergraduate students in management classes volunteered to participate in the study as part of a class lab requirement resulting in a sample of 128. Students were offered an alternative assignment to participating in the study. Three responses contained missing data and were excluded. Five responses were duplicate responses and were also deleted leaving 120 cases. Eleven participants did not disclose demographic information. Participants were Caucasian (49.5%), Hispanic (26.3%), Asia/Pacific Islander (18.2%), African-American (1%) and Other (5%). The majority of the sample was single and never married (76.1%) with only 15.6% married, 4.6% separated or divorced and 3.7% unmarried but living with parents. Nearly fifty percent (49.5%) of the sample was male, and only 13.9% had children living at home. The sample was highly educated with respondents indicating an Associate degree - 2 years (45.9%),

some college or technical/vocational training (36.7%), a Bachelor's degree – 4 years (12.8%), high school graduate/GED (3.7%), or a postgraduate degree, e.g., Master's degree (.9%). Just over eighty percent (80.7%) of the participants were currently employed with an average tenure of 5.6 years. Exploratory Factor Analysis and reliabilities were conducted on the created items to provide internal consistency checks of the variables. The KMO test provides a value of .854 (see Table 4.1) indicating that there was sufficient multicollinearity to warrant conducting factor analysis. The Bartlett's test of sphericity (see Table 4.1) was significant ( $p < .01$ ) indicating that this is not an identity matrix and that there is sufficient collinearity between some of the variables to warrant further analysis, again affirming that factor analysis would be appropriate for this data. To determine the number of factors, a combination of the Scree Plot, the Kaiser Criterion, the oblique rotated factor structure, and underlying theory were evaluated. The Kaiser criterion (see Table 4.2) identified two distinct factors with Eigenvalues greater than one. In looking at the Scree Plot (see Figure 4.1), a distinct break in the line on the graph at factor #2 can be seen. Additionally, the factor loadings (see Table 4.3) identified two distinct factors with the items loading on their *a priori* factors. Reliabilities (see Table 4.4 and Table 4.5) were satisfactory for both specific human capital ( $\alpha = .90$ ) and general human capital ( $\alpha = .85$ ). Combined, the evidence indicated sufficient validation for the specific human capital and general human capital scales.

Table 4.1 KMO Test and Bartlett's Test of Sphericity for Human Capital EFA

**Human Capital scale validation Factor Analysis KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	737.270
	df	45
	Sig.	.000

Table 4.2 Kaiser Criterion for Human Capital EFA

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5.129	51.292	51.292	4.769	47.687	47.687	4.183
2	1.718	17.181	68.473	1.400	14.002	61.689	3.683
3	.795	7.951	76.424				
4	.676	6.764	83.188				
5	.426	4.260	87.448				
6	.348	3.480	90.928				
7	.307	3.069	93.997				
8	.246	2.462	96.459				
9	.203	2.032	98.490				
10	.151	1.510	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

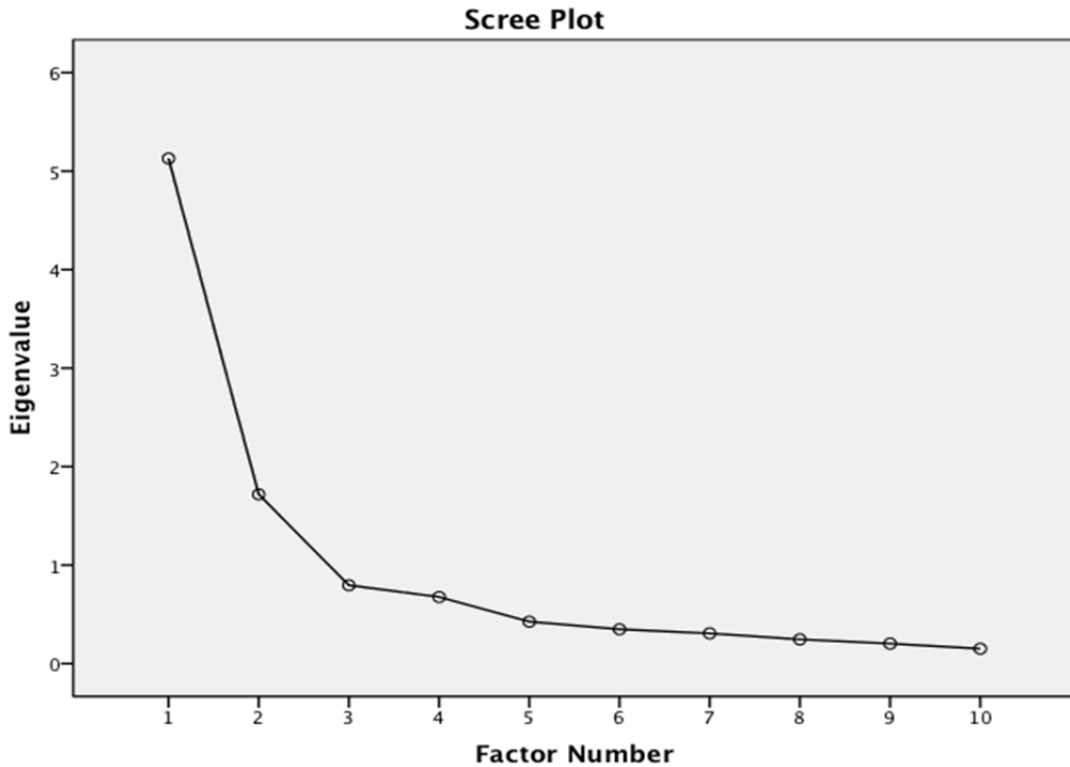


Figure 4.1 Scree Plot for Human Capital EFA.



Table 4.3 Pattern Matrix Loading for Human Capital EFA

Pattern Matrix<sup>a</sup>

	Factor	
	1	2
I have many skills that are specific to <organization name>.	.909	-.043
I have much knowledge that is specific to <organization name>.	.900	-.058
I have expertise in a specialized area that is specific to <organization name>.	.775	-.025
I have knowledge about policies, procedures or processes that are specific to <organization name>.	.691	.115
I have knowledge, skills and training from mentoring, and/or coaching that is specific to <organization name>.	.720	.073
I have skills that are marketable in a wide variety of organizations.	.301	.532
My skills are broadly marketable.	-.016	.855
I have skills and knowledge that are highly valued in a broad range of industries.	-.132	.908
I have broad professional skills and knowledge.	-.001	.823
I have education that would be valued by many organizations.	.162	.387

Extraction Method: Principal Axis Factoring.  
 Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 4.4 Reliability statistics for Human Capital Scale Validation

variable	Cronbach's Alpha	N of Items
<b>Specific Human Capital</b>	.900	5
<b>General Human Capital</b>	.851	5

Table 4.5 Item-Total Statistics for Specific and General Human Capital

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I have many skills that are specific to <organization name>.	15.95	6.888	.803	.867
I have much knowledge that is specific to <organization name>.	15.93	7.095	.796	.870
I have expertise in a specialized area that is specific to <organization name>.	15.99	6.916	.718	.886
I have knowledge about policies, procedures or processes that are specific to <organization name>.	15.88	7.348	.729	.884
I have knowledge, skills and training from mentoring, and/or coaching that is specific to <organization name>.	16.02	6.773	.729	.885
I have skills that are marketable in a wide variety of organizations.	15.17	6.812	.635	.827
My skills are broadly marketable.	15.28	6.083	.768	.791
I have skills and knowledge that are highly valued in a broad range of industries.	15.38	6.287	.734	.801
I have broad professional skills and knowledge.	15.31	6.333	.745	.798
I have education that would be valued by many organizations.	15.14	7.383	.443	.875

Both an exploratory factor analysis and a confirmatory factor analysis were performed on the organizational sample that supported the findings of the validation study. Two distinct factors emerged with satisfactory reliabilities for both specific human capital ( $\alpha=.92$ ) and general human capital ( $\alpha=.89$ ).

#### *4.3.3 Social Capital*

Following the example of Thompson (2005) and Ng and Feldman (2010), internal social capital was measured using scales developed by Ferris et al. (2005). Because there were not any external social capital scales at the time of Ng and Feldman's (2010) study, they modified the internal social capital scale to assess external social capital. This external social capital scale used by Ng and Feldman (2010) was also used in the current study. Both internal capital and external social capital measures consist of six items measured on a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). Reliabilities were satisfactory for both internal social capital ( $\alpha=.93$ ) and external social capital ( $\alpha=.95$ ). The items may be seen in Appendix F.

#### *4.3.4 Organizational Identification*

The current research measured organizational identification with six items measured on a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). This scale was developed and validated by Mael (1988) and Mael and Ashforth (1992, 1995). In a meta-analysis, Riketta (2005) noted that the scale developed by Mael (1988) was the most widely used. Additionally, in the meta-analysis, Riketta found that the scale had similar results to other scales that were less used as well as to the overall measure results. He stated that this evidence suggested that the Mael (1988) scale seemed to best capture the concept of organizational identification, leading the current research to use the Mael (1988) and Mael and Ashforth (1992; 1995) scales.

An EFA performed on the variables in the study revealed that the factor loadings of the item "*If a story in the media criticized <organization name>, I would feel embarrassed*" were much lower than the other items. Additionally, factor loadings on one item in the organizational disidentification scale was much lower than the other items in that scale "*I am embarrassed to*

*be part of this organization.*” The word similarity in the two items (“I am embarrassed” and “I would feel embarrassed”) may have an impact on the scales. A test of reliability on the organizational identification scale indicated an increase from an alpha of .90 to .93 when these items were dropped. Further analysis was performed without these two items. Reliability of organizational identification was satisfactory ( $\alpha=.92$ ). The items can be seen in Appendix F.

#### *4.3.5 Organizational Disidentification*

Disidentification research has been primarily qualitative in nature. One quantitative measure was validated (Kreiner & Ashforth, 2004) and is used in this current research. The scale was measured on a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). One item was dropped from the scale for analysis (see discussion under *organizational identification* variable) which resulted in satisfactory reliability ( $\alpha=.90$ ). The items can be seen in Appendix F.

#### 4.4 Factor Structure and Dimensionality of Constructs

CFA's are not appropriate for formative scales (Crossley et al., 2001; Hom et al., 2009). However, following the example of Mitchell et al. (2001) and Hom et al. (2009), EFA's were conducted on job embeddedness items, and reliabilities were computed for each dimension in order to test internal consistency. Internal consistency was satisfactory for on-the-job fit ( $\alpha=.83$ ), off-the-job fit ( $\alpha=.85$ ), on-the-job sacrifice ( $\alpha=.78$ ), off-the-job sacrifice ( $\alpha=.76$ ), and off-the-job links ( $\alpha=.76$ ). There was lower reliability for on-the-job links ( $\alpha=.48$ ), but that was expected due to the types of unrelated questions that are asked in order to establish links at work (How many coworkers do you interact with regularly? How many coworkers are highly dependent on you? How many work teams are you on?). However, the composite on-the-job embeddedness and off-the-job embeddedness variables had satisfactory internal consistency and reliability ( $\alpha=.83$  &  $.80$  respectively).

A measurement model CFA was conducted that included all reflective constructs. Various indices were used to evaluate model fit including  $\chi^2$ , Comparative Fit Index (CFI), Incremental Fit Index (IFI) (also known as the Bollen's Fit Index - BL89), Root Mean Square

Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR).  $\chi^2$  indicates an excellent fit with the data if  $p > .05$ . CFI and IFI (BL89) indicate a good fit if  $\geq .95$  (Hu & Bentler, 1998; Hu & Bentler, 1999) and is generally acceptable if  $\geq .90$ . RMSEA  $\geq .10$  suggests poor fit while  $\geq .08$  reflects satisfactory fit and  $\leq .05$  indicates excellent fit (Browne & Cudeck, 1993; Hu & Bentler, 1998). SRMR  $< .08$  is reflective of an excellent fit (Hu & Bentler, 1999) and  $< .10$  is generally acceptable (Kline, 2005).

The resulting fit statistics for the measurement model ( $\chi^2 = 1197.47$ ,  $df=390$ , CFI = .92, IFI = .92, RMSEA = .07, SRMR = .045) demonstrated an acceptable fit with the data. The CFI, IFI, SRMR and RMSEA were in acceptable and satisfactory ranges, and factor loadings were all significant and generally very high (standardized loadings ranged from 0.68-0.92).

Following the example of others (Edwards, 2001; Mallard & Lance, 1998), a series of alternative measurement models were tested to determine the distinctness of various factors. Specifically, human capital was separated into two factors (general human capital and specific human capital) creating nested models which were tested. In the first model, the factors were allowed to correlate (showing two distinct correlated factors). In the second model, factors were not allowed to correlate (correlations fixed to zero, showing two distinct uncorrelated factors). In the third model, factor correlations were fixed to unity (1.0). The same procedure was followed with social capital, dividing it into two factors (internal social capital and external social capital). Following the guidelines demonstrated by James, Mulaik, and Brett (1982), significant differences between models were assessed using  $\Delta\chi^2$  (Change in  $\chi^2$ ). Results can be seen in Table 4.5.

Table 4.6 Confirmatory Factor Analysis Scale Dimensionality Results for the Total Sample (N=380)

Confirmatory Factor Analysis Scale Dimensionality Results for the Total Sample (N = 380) <sup>a</sup>									
Model	$\chi^2$	<i>df</i>	CFI	IFI (BL89)	RMSEA	SRMSR	Model Comparisons	$\Delta\chi^2$	$\Delta df$
Specific HC -to- General HC									
1. 2 distinct correlated factors	209.41**	34	0.93	0.93	0.12	0.056			
<b>2. 2 uncorrelated factors</b>	<b>210.02**</b>	<b>35</b>	<b>0.93</b>	<b>0.93</b>	<b>0.11</b>	<b>0.065</b>	<b>1 vs. 2</b>	<b>0.61</b>	<b>1</b>
3. 1 factor	1544.68**	35	0.43	0.43	0.34	0.3	1 vs. 3	1335.27**	1
Internal SC -to- External SC									
<b>1. 2 distinct correlated factors</b>	<b>640.45**</b>	<b>53</b>	<b>0.88</b>	<b>0.88</b>	<b>0.17</b>	<b>0.048</b>			
2. 2 uncorrelated factors	933.24**	54	0.82	0.82	0.21	0.39	1 vs. 2	292.79**	1
3. 1 factor	1287.41**	54	0.75	0.75	0.25	0.094	1 vs. 3	646.96**	1
Org ID -to- Org Commit									
<b>1. 2 distinct correlated factors</b>	<b>238.66**</b>	<b>43</b>	<b>0.94</b>	<b>0.94</b>	<b>0.11</b>	<b>0.05</b>			
2. 2 uncorrelated factors	547.51**	44	0.84	0.84	0.17	0.36	1 vs. 2	308.85**	1
3. 1 factor	467.47**	44	0.86	0.86	0.16	0.069	1 vs. 3	228.81**	1

Note. Model in bold indicates best fitting model. *df* = model degrees of freedom, CFI = Comparative Fit Index, IFI = Incremental Fit Index, BL89 = Bollen's Fit Index, RMSEA = root mean square error of approximation, SRMSR = standardized root mean square residual. HC = human capital, SC = social capital, Org ID = organizational identification, Org Commit = organizational commitment.

<sup>a</sup>Results from C1 file

\*\**p* < .01

As shown in Table 4.6, both human capital and social capital were best modeled as higher order constructs indicating that each one consisted of two distinct dimensions. Human capital consisted of specific human capital and general human capital while social capital was defined by internal social capital and external social capital.

Nested measurement models were also compared to determine the distinctness of organizational identification and organizational commitment. Although much research demonstrates that organizational identification and organizational commitment are independent constructs (Ashforth et al., 2008; Ashforth & Mael, 1989; Cole & Bruch, 2006; Kreiner & Ashforth, 2004; Mael & Ashforth, 1992; 1995; Meyer et al., 2006; Riketta, 2005), they do have potential for overlap. The majority of research has focused its attention on affective organizational commitment because it is the most similar to organizational identification (Riketta, 2005; van Knippenberg & Sleebos, 2006). Three nested models (the same as were used with human capital and social capital) consisting of items from organizational identification (Mael & Ashforth, 1988; 1992; 1995) and affective organizational commitment scales (Meyer &

Allen, 1997) were tested. As can be seen from the results in Table 4.6, the two-factor model fit the data better than the one-factor model ( $\chi^2 = 238.66$ , CFI = .94, IFI = .94, RMSEA = .11, SRMR = .05). In every case, the fit measures for this hypothesized model were better than the one-factor model, and the  $\chi^2$  difference test was significant. Indices from the one-factor model also fell outside the acceptable ranges. Therefore, although these two constructs are correlated with each other, they are independent.

#### *4.4.1 Control Variables*

As mentioned previously, the focus of this dissertation is on-the-job embeddedness. However, off-the-job embeddedness has been demonstrated to relate to some work-related outcomes (Lee et al., 2004) and is included as a control variable. Perceived job alternatives is frequently a control variable in job embeddedness literature (Burton, Holtom, Sablinski, Mitchell, & Lee, 2010; Ramesh & Gelfand, 2010) and is used as a control variable in the current study because people might seek to acquire more human capital and social capital to improve their job alternatives, and those most motivated to improve job alternatives should be those who currently feel their alternatives are limited. Gender and race are demographics typically controlled for in job embeddedness literature in order to ensure that effects are not due to social categories (Felps et al., 2009; Hom et al., 2009; Mitchell et al., 2001; Swider et al., 2011; Wheeler et al., 2010).

## CHAPTER 5

### RESULTS

#### 5.1 Preliminary Results

Means, standard deviations and correlations among study variables are presented in Table 5.1.

Table 5.1 Means, Standard Deviations, Correlations and Reliabilities Among Study Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Job Embeddedness (on-the-job)	-0.032	0.54	(.83)									
2. Job Embeddedness (off-the-job)	-0.006	0.62	.45**	(.80)								
3. Organizational Identification	4.64	0.98	.60**	.35**	(.92)							
4. Organizational Disidentification	1.53	0.74	-.42**	-.25**	-.39**	(.90)						
5. Internal Social Capital	3.81	1.06	.40**	.25**	.46**	-.14**	(.93)					
6. External Social Capital	3.84	1.10	.29**	.19**	.34**	-.03	.73**	(.95)				
7. Specific Human Capital	4.16	1.12	.30**	.17**	.36**	-.14**	.34**	.25**	(.92)			
8. General Human Capital	4.80	0.81	.14**	.09	.13*	.05	.28**	.34**	.08	(.89)		
9. Job Alternatives	3.49	1.23	-.08	.04	-.10*	.22**	.08	.24**	-.03	.40**	(.77)	
10. Race	0.81	0.39	.00	-.00	.01	-.00	.10*	.02	.03	-.05	-.10*	
11. Sex	0.16	0.36	.03	-.06	.04	.00	.09	.05	-.01	.01	-.03	-.09

Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

\*\* $p < .01$  \* $p < .05$

Preliminary inspection of the data provides initial support for job embeddedness as a positive predictor of human capital and social capital. The results indicate that job embeddedness is significantly and positively correlated with human capital (specific = .30, general = .14;  $p < .01$ ) and social capital (internal = .40, external = .29;  $p < .01$ ). Organizational identification is highly correlated with internal social capital (.46,  $p < .01$ ) and less highly correlated with external social capital (.34,  $p < .01$ ) while organizational disidentification was significantly and negatively correlated with internal social capital (-.14,  $p < .01$ ) but not significantly related to external social capital (-.03). These correlations would initially lend support for the concept that people identifying with their organizations might be more likely to focus on the internal aspects of the job as opposed to the external aspects while people disidentifying with the organization do not focus on internal aspects as much. Further support



for this idea can be seen in the correlation between organizational disidentification and human capital (specific =  $-.14$ ,  $p < .01$ ; general =  $.05$ ). However, with organizational identification, the correlations with human capital are reversed. Organizational identification was more highly correlated to general human capital ( $.36$ ,  $p < .01$ ) than specific human capital ( $.13$ ,  $p < .05$ ).

## 5.2 Hypothesis Tests

Hierarchical OLS regressions were used to test hypotheses. The analyses for hypothesis 1a and 1b and hypothesis 2a and 2b were performed using four individual regressions, each one with a different dependent variable – internal social capital, external social capital, specific human capital and general human capital. All four regressions used the same control variables and predictors. In step 1, internal social capital, external social capital, specific human capital and general human capital were regressed on the control variables including sex, race, job alternatives and off-the-job embeddedness. In step 2, on-the-job embeddedness was added. Table 5.2 and Table 5.3 contain the results from these analyses.

Table 5.2 Regression Results for Hypothesis 1

Variable	Specific Human Capital				General Human Capital			
	Model 1		Model 2		Model 1		Model 2	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	4.226	18.961***	4.148	19.143***	3.893	25.895***	3.856	25.931***
Sex	-.003	-.056	-.016	-.325	.026	.536	.017	.364
Race	.026	.505	.026	.530	-.004	-.090	-.004	-.086
Perceived job alternatives	-.038	-.746	-.012	-.243	.392	8.237***	.409	8.652***
Off-the-job embeddedness	.173	3.404***	.048	.873	.075	1.590	-.004	-.075
On-the-job embeddedness			.277	4.996***			.175	3.343***
R <sup>2</sup> ( <i>adjusted R<sup>2</sup></i> )	.032 (.022)		.093 (.080)		.162 (.153)		.186 (.175)	
ΔR <sup>2</sup>			.061				.024	
<i>F</i>	3.094*		28.055		18.099***		29.277	
<i>F</i> change			24.961***				11.178***	
<i>df</i>	4, 375		1, 374		4, 375		1, 374	
<i>N</i>	380		380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+  $P < .10$

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Table 5.3 Regression Results for Hypothesis 2

Variable	Internal Social Capital				External Social Capital			
	Model 1		Model 2		Model 1		Model 2	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	3.226	15.754***	3.127	16.193***	2.940	13.937***	2.859	14.026***
Sex	.117	2.356*	.099	2.123*	.072	1.465	.058	1.226
Race	.122	2.449*	.122	2.616**	.047	.949	.047	.994
Perceived job alternatives	.087	1.763 <sup>+</sup>	.122	2.603**	.244	4.951***	.272	5.679***
Off-the-job embeddedness	.248	5.033***	.082	1.577	.181	3.691***	.050	.950
On-the-job embeddedness			.368	7.071***			.290	5.454***
<i>R</i> <sup>2</sup> ( <i>adjusted R</i> <sup>2</sup> )	.091 (.081)		.198 (.187)		.098 (.088)		.164 (.153)	
$\Delta R^2$			.107				.066	
<i>F</i>	9.330***		59.324		10.165***		31.916	
<i>F</i> change			49.994***				29.751***	
<i>df</i>	4, 375		1, 374		4, 375		1, 374	
<i>N</i>	380		380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+  $P < .10$

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Hypothesis 1 predicted that on-the-job embeddedness would be positively related to human capital (both specific and general). The results in Table 5.2 indicate that when controlling for sex, race, perceived job alternatives, and off-the-job embeddedness, on-the-job embeddedness was positively related to specific human capital ( $R^2=.080$ ;  $\beta=.277$ ,  $p<.01$ ) and general human capital ( $R^2=.175$ ;  $\beta=.175$ ,  $p<.01$ ) supporting H1a and H1b. Hypothesis 2 predicted that on-the-job embeddedness would be positively related to social capital (both internal and external). The results in Table 5.3 indicate that when controlling for sex, race, perceived job alternatives, and off-the-job embeddedness, on-the-job embeddedness was positively related to internal social capital ( $R^2=.187$ ;  $\beta=.368$ ,  $p<.01$ ) and external social capital ( $R^2=.153$ ;  $\beta=.290$ ,  $p<.01$ ), supporting H2a and H2b. Interestingly, results indicated that men have more internal social capital than do women ( $\beta=.099$ ,  $p<.05$ ). This finding was surprising given that this research was conducted at a healthcare organization where the population and sample was largely female.

Hypothesis 3 and 4 predicted that the level of an employee's identification with his/her organization would moderate the positive relationships between on-the-job embeddedness with specific human capital and internal social capital. To test this hypothesis, analyses were performed using two individual regressions, one with internal social capital as the dependent variable and the other with specific human capital as the dependent variable. Both regressions used the same control variables and predictors. In step 1 internal social capital and specific human capital were regressed on the aforementioned control variables. In step 2, the predictors were added including on-the-job embeddedness and organizational identification. In step 3, interaction variables were added: organizational identification interacting with on-the-job embeddedness. Variables were centered before interaction terms were created in order to reduce nonessential multicollinearity (Pedhazur, 1997). The significant interactions were then plotted according to methods described by Aiken and West (1991). Regression results are provided in Table 5.4 and Table 5.5.

Table 5.4 Regression Results for Hypothesis 3

Variable	Internal Social Capital					
	Model 1		Model 2		Model 3	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	3.226	15.754***	3.067	16.628***	3.047	16.588***
Sex	.117	2.356*	.089	2.006*	.087	1.959+
Race	.122	2.449*	.122	2.735**	.117	2.635**
Perceived job alternatives	.087	1.763+	.143	3.197***	.137	3.068**
Off-the-job embeddedness	.248	5.033***	.044	.888	.050	1.005
Organizational identification			.344	6.162***	.364	6.472***
On-the-job embeddedness			.181	3.096**	.188	3.228***
On-the-job embeddedness x organizational identification					.102	2.215*
<i>R</i> <sup>2</sup> ( <i>adjusted R</i> <sup>2</sup> )	.091 (.081)		.272 (.260)		.281 (.268)	
$\Delta R^2$			.181		.009	
<i>F</i>	9.330***		55.782		60.686	
<i>F</i> change			46.452***		4.904*	
<i>df</i>	4, 375		2, 373		1, 372	
<i>N</i>	380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+  $P < .10$

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Table 5.5 Regression Results for Hypothesis 4

Variable	Specific Human Capital					
	Model 1		Model 2		Model 3	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	4.226	18.961***	4.095	19.408***	4.094	19.354***
Sex	-.003	-.056	-.024	-.502	-.024	-.504
Race	.026	.505	.026	.539	.026	.532
Perceived job alternatives	-.038	-.746	.006	.118	.005	.111
Off-the-job embeddedness	.173	3.404***	.017	.312	.017	.317
Organizational identification			.287	4.737***	.288	4.685***
On-the-job embeddedness			.120	1.902 <sub>(.058)</sub>	.121	1.903 <sub>(.058)</sub>
On-the-job embeddedness x organizational identification					.005	.108
R <sup>2</sup> ( <i>adjusted R<sup>2</sup></i> )	.032 (.022)		.144 (.130)		.144 (.128)	
ΔR <sup>2</sup>			.112		.000	
<i>F</i>	3.094*		27.508		27.520	
<i>F</i> change			24.414***		.012	
<i>df</i>	4, 375		2, 373		1, 372	
<i>N</i>	380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+  $P < .10$

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Consistent with hypothesis 3, an interaction effect was found between job embeddedness and organizational identification in predicting internal social capital ( $\beta=.102$ ,  $p<.05$ ). Although this interaction was significant ( $p<.05$ ), it accounted for less than 1% of the variance ( $\Delta R^2 = .009$ ,  $F(1, 372) = 4.90$ ,  $p < .05$ ). However, interactions in moderated multiple regression have very low power and are hard to detect (Aguinis, 2002; Aguinis, Beaty, Boik, & Pierce, 2005; Cohen, Cohen, West & Aiken, 2003). Thus, even this small significant effect is important. As shown in Figure 5.1, there is a strong positive relationship between job embeddedness and internal social capital among those with high organizational identification. In contrast, the positive relationship between job embeddedness and internal social capital is weaker among those with less organizational identification. Taken together, these results provide support for hypothesis 3. However, organizational identification did not moderate the

relationship between job embeddedness and specific human capital. Thus, no support was found for hypothesis 4.

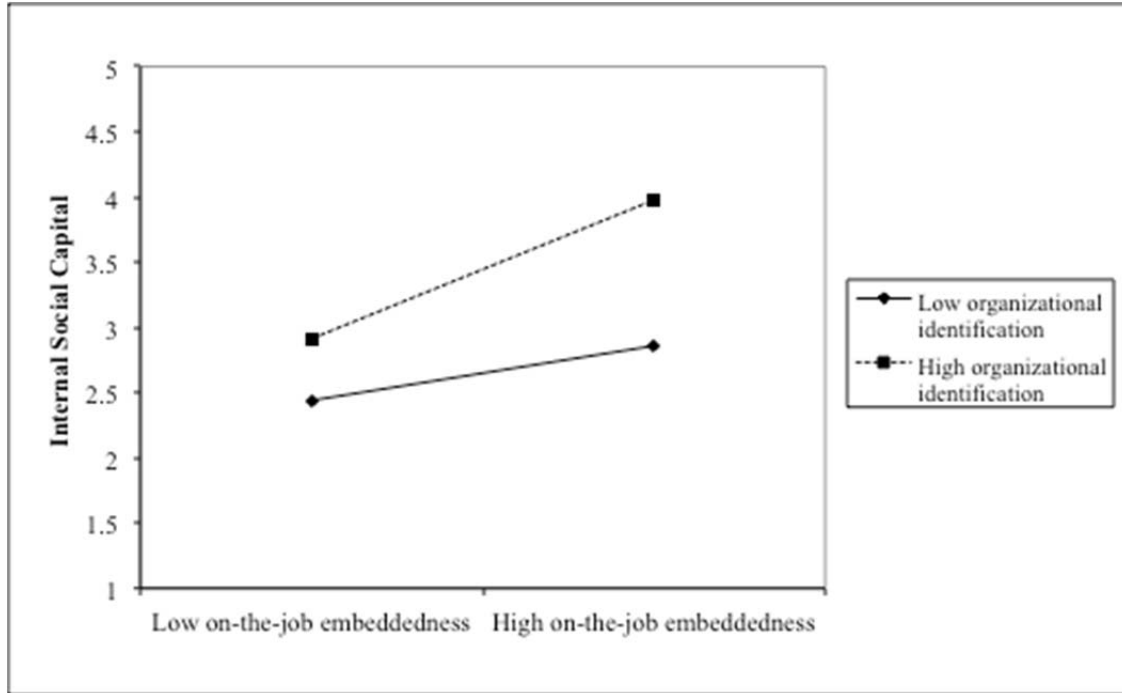


Figure 5.1 Graph of Interaction Between Job Embeddedness and Organizational Identification with Internal Social Capital

Hypothesis 5 and 6 analyses were performed using two additional regressions. In step 1, external social capital and general human capital were regressed on the control variables. In step 2, the predictors were added including on-the-job embeddedness and organizational disidentification. In step 3, interaction variables were added: organizational disidentification interacting with on-the-job embeddedness. Variables were centered before interaction terms were created in order to reduce nonessential multicollinearity (Pedhazur, 1997). The significant interactions were then plotted according to methods described by Aiken and West (1991). Regression results are provided in Table 5.6 and Table 5.7.

Table 5.6 Regression Results for Hypothesis 5

Variable	General Human Capital					
	Model 1		Model 2		Model 3	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	3.893	25.895***	3.878	25.659***	3.826	25.123***
Sex	.026	.536	.016	.351	.014	.295
Race	-.004	-.090	-.005	-.105	-.005	-.098
Percieved job alternatives	.392	8.237***	.400	8.267***	.409	8.462***
Off-the-job embeddedness	.075	1.590	.000	-.003	.003	.053
Organizational disidentification			.042	.801	-.008	-.134
On-the-job embeddedness			.191	3.412***	.197	3.530***
On-the-job embeddedness x organizational disidentification					-.113	-2.163*
R <sup>2</sup> ( <i>adjusted R<sup>2</sup></i> )	.162 (.153)		.188 (.174)		.198 (.183)	
ΔR <sup>2</sup>			.026		.010	
<i>F</i>	18.099***		24.003		28.682	
<i>F</i> change			5.904**		4.679*	
<i>df</i>	4, 375		2, 373		1, 372	
<i>N</i>	380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+ *P* < .10

\* *p* < .05

\*\* *p* < .01

\*\*\* *p* < .001

Table 5.7 Regression Results for Hypothesis 6

Variable	External Social Capital					
	Model 1		Model 2		Model 3	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
(Constant)	2.940	13.937***	2.897	13.992***	2.854	13.625***
Sex	.072	1.465	.058	1.210	.056	1.176
Race	.047	.949	.046	.969	.046	.974
Percieved job alternatives	.244	4.951***	.261	5.319***	.266	5.416***
Off-the-job embeddedness	.181	3.691***	.056	1.046	.057	1.077
Organizational disidentification			.056	1.036	.025	.422
On-the-job embeddedness			.310	5.476***	.314	5.538
On-the-job embeddedness x organizational disidentification					-.070	-1.309
R <sup>2</sup> ( <i>adjusted R<sup>2</sup></i> )	.098 (.088)		.167 (.153)		.171 (.155)	
ΔR <sup>2</sup>			.069		.004	
<i>F</i>	10.165***		25.580		27.294	
<i>F</i> change			15.415***		1.714	
<i>df</i>	4, 375		2, 373		1, 372	
<i>N</i>	380		380		380	

note: Race was coded 1=white, 0=not white

Sex was coded 1=male, 0=female

+ *P* < .10

\* *p* < .05

\*\* *p* < .01

\*\*\* *p* < .001

Although, the interaction effects between organizational disidentification and job embeddedness were significant for general human capital ( $\beta = -.113, p < .05$ ) and there was a significant change in  $R^2$  ( $\Delta R^2 = .010, F(1, 372) = 4.68, p < .05$ ), hypothesis 5 predicted that as organizational disidentification increases, there would be a more positive relationship between job embeddedness and general human capital. As shown in Figure 5.2, the directionality was opposite the expected direction, such that as organizational disidentification decreases, there was a more positive relationship between job embeddedness and general human capital. Job embedded employees with higher levels of organizational disidentification reported less general human capital than those with lower levels of organizational disidentification.

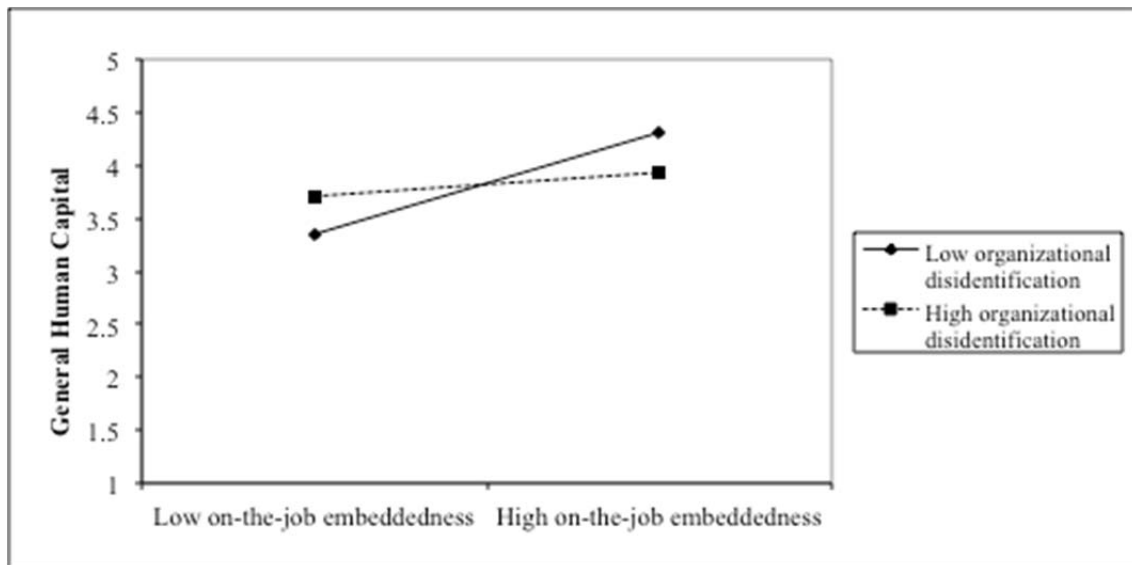


Figure 5.2 Graph of Interaction Between Job Embeddedness and Organizational Disidentification with General Human Capital

A possible explanation for the unexpected direction in this relationship could lie in multicollinearity issues. Factor analysis indicated that job embeddedness and organizational identification were two independent constructs, yet they were highly correlated (correlation = .60). To check for multicollinearity, the variance inflation factor (VIF) and the tolerance were tested. In all cases, tolerance was greater than .50 and VIF remained less than 1.8, well within acceptable ranges. However, when running a model including two variables that are highly

correlated, the multicollinearity can cause suppression effects to occur; when inclusion of two variables improves the betas of one or both of the variables, then a suppression situation occurs (Paulhus, Robins, Trzesniewski, & Tracy, 2004). Suppressors are widely observed in behavioral research but sometimes occur inadvertently (Massen & Bakker, 2001) as is the case in the current research. Net suppression (also known as negative suppression) occurs when two IV's are correlated ( $r_{x_1x_2}$ ), both IV's are positively correlated with the DV ( $By_{x_1}$ ,  $By_{x_2}$ ), but when adding the second variable ( $By_{x_1.x_2}$ ,  $By_{x_2.x_1}$ ), the sign of the suppressor variable changes (Massen & Bakker, 2001; Nickerson, 2008; Paulhus et al., 2004). Massen and Bakker (2001) suggested that in situations of net suppression, unexpected results can occur and the only solution is to drop one of the highly correlated variables. However, they noted that in cases where variables are a key part of theory and cannot be dropped, the results would be at least partially incorrect. This explanation may account for the unexpected nature of the interaction effects found between organizational identification and job embeddedness with general human capital. Regarding Hypothesis 6, there was not a significant interaction effect between job embeddedness and organizational disidentification in predicting external social capital. Thus, no support was found for hypothesis 6.



## CHAPTER 6

### DISCUSSION

#### 6.1 Dissertation Contributions

Analysis of employees from this healthcare organization provides evidence for a relationship between job embeddedness and outcomes such as human capital and social capital. Most importantly, general support was found for the notion that job embeddedness leads to differences in behavior and outcomes in the workplace depending on how employees view their job embeddedness. Results demonstrated that employees who are equally embedded in an organization behave differently in their development of general versus specific human capital and internal versus external social capital depending on whether they are identified or disidentified with the organization. As hypothesized, the level of organizational identification increased the strength of the relationship between job embeddedness and internal social capital. Contrary to expectations, disidentification decreased the strength of the relationship between job embeddedness and general human capital.

These findings contribute to the literature on job embeddedness in several ways. First, this dissertation provides a potential explanation for some inconsistent findings in previous job embeddedness research. While job embeddedness theory has until now considered embeddedness to have a positive impact on employee attitudes and behavior, empirical research has shown both positive and negative outcomes. Previous job embeddedness research (Mitchell et al., 2001; Lee et al., 2004) has shown that individuals are less likely to turn over when they are embedded in their jobs by good fit, many links, and much to sacrifice. What is missing from this focus on the benefits of fit, links, and sacrifice is how the employee perceives his/her situation, and whether he/she frames job embeddedness as a positive or negative situation. The employee may have a good fit with the organization and with his/her

current home/community situation, a broad network in the organization that helps him/her be successful in work, and they may have much to sacrifice both at work and at home. These elements do not mean, however, that the employee views work situation as good. This dissertation suggests that if employees are embedded in a job with an organization they do not identify with, they behave differently than those who do identify with their organization.

Overall, I find the results support that while job embeddedness itself is important, the way an employee views his/her organization (which likely relates to how he/she feels about the job embeddedness) also plays an important role. Job embeddedness itself is an objective situation (i.e., an employee is either embedded or not) and by itself, it does not assess the desirability of being embedded. Employees are embedded because of circumstances at work and at home, but they may see the embeddedness favorably and have positive outcomes or unfavorably and have completely different outcomes. Outcomes will vary within a sample of job embedded individuals based on whether the individual has a positive attachment to the organization or not. The framework of job embeddedness research needs to include this important concept.

While these results suggest that our theoretical understanding of job embeddedness needs to take into account whether or not employees identify with their organizations, further work is clearly needed. Of the four moderating hypotheses, only the moderating effects of organizational identification on the relationship between job embeddedness and internal social capital was completely supported. There was a positive relationship between job embeddedness and internal social capital such that as job embeddedness increased, internal social capital also increased. Moreover, this relationship was stronger among those with high organizational identification. This finding suggests that how employees identify with their employer is important among job embedded individuals. Internal social capital was chosen as an outcome because it is important to the organization and because it is a result of networking behavior that should be different depending on organizational identification. This reasoning is

supported by the results in the current study that suggests employees who identify with their organizations are likely to see the development and maintaining of quality internal social capital as most beneficial and valuable to their organization. Thus, identified employees will focus their attention on increasing their internal social capital thereby maintaining their value and employability within the organization. Employees less identified will not seek to develop these important relationships.

Using disidentification as a moderator had mixed results. I hypothesized that the relationship between job embeddedness and general human capital would be moderated by organizational disidentification and found a significant interaction effect. However, I additionally hypothesized that the relationship would be stronger for those with higher disidentification, and this was not the case; the relationship was stronger for those with lower disidentification. This outcome was unexpected since I theorized that employees who disidentified with the organization would likely be focusing on general human capital in an effort to make them more employable elsewhere. There are some possible explanations for this unexpected finding. First, if one does not consider the fact that the regression is impacted by net suppression and takes the results literally, then these results suggest that as employees become more job embedded and more disidentified with their organization, they become resigned to their current employment without the hope of ever leaving and begin to do only what is necessary to maintain employment and no more. In agreement with this explanation, Ng and Feldman (2007, 2010) suggested that many employees see job embeddedness as a signal of success, job security and stability and will, thus, decrease their social capital development behaviors over time. Additionally, Crossley et al. (2007) noted that some job embedded employees might be stuck in unfavorable work situations causing them to lose motivation. Together, these two articles lend some support to this explanation resulting in the possibility that these highly disidentified employees tend to do less overall instead of trying to better their chances of exiting the organization by increasing general human capital. Thus, a situation may be created where

a job embedded and less disidentified individual may in fact increase general human capital more than a highly disidentified individual.

Second, as noted above, there is the potential problem of multicollinearity between organizational identification and job embeddedness. Multicollinearity of the variables in this relationship may be causing a net suppression effect resulting in partially incorrect results (Massen & Bakker, 2001). Although organizational identification and organizational disidentification were theorized to be a good representation of an employee being in a favorable or unfavorable work situation (respectively), other variables that were not measured may turn out to be better moderators in job embeddedness relationships. Future research will explore other possible moderators that are not so highly correlated with job embeddedness making statistical analysis and interpretation less questionable.

The multicollinearity of job embeddedness and organizational identification highlights another question: Can a person be job embedded and not identified? Fit, links, and sacrifice are developed as you spend more time in an organization and meta-analysis results indicate that organizational identification is positively correlated with tenure (Riketta, 2005). However, as individuals remain in organizations for long periods of time, many changes can occur. I suggest that it is very likely that people can be job embedded yet not identified with their organization. For example, it is possible that an employee is hired by a firm and over time learns the values, policies, goals, etc., of the organization. The employee becomes embedded in his/her job while never really identifying with the organization although he/she may be fully satisfied in the work itself. In another scenario, job embedded employees might highly identify with an organization, then policies or other changes occur and they no longer identify with the organization; in fact, they may even disidentify, yet still they are embedded in their job. Thus, although there is a high correlation between job embeddedness and organizational identification, it would be very likely to find individuals who are job embedded and yet not identified with the organization.

## 6.2 Implications for Managers

The evidence in this research suggests that employers can improve human and social capital in employees by increasing their job embeddedness. For example, employers can give ample opportunity to build solid organizational links, establish ways for employees to be involved in long-term projects, create opportunity for business and social networking, and provide benefits both financial and psychological that could be seen as sacrifices if one were to leave. Employers should seek to increase the organizational identification of employees in general, ensuring that those employees who are embedded in their jobs will have a favorable view of their job embeddedness, thereby increasing potential outcomes such as internal social capital. Since job embedded employees who disidentify with the organization will have reduced human capital, managers should identify these individuals and seek to remedy issues that are causing disidentification.

## 6.3 Implications for Researchers

Previous literature has primarily focused on the effects job embeddedness has on turnover. The current research extends job embeddedness beyond turnover and absenteeism to human capital and social capital. Results showed that job embeddedness is not only related to human and social capital in general, but to the individual components of human and social capital as well. Both internal and external social capital as well as specific and general human capital were significantly and positively related to job embeddedness.

Most importantly, the current research helps fill the gap of how job embeddedness leads to different types of behaviors and outcomes in the workplace based on how employees view their job embeddedness situation. I found that organizational identification moderates the relationship between job embeddedness and internal social capital while organizational disidentification moderates the relationship between job embeddedness and general human capital. Researchers need to consider that moderating effects may strengthen or diminish the relationships between job embeddedness and important outcomes such as social and human

capital. In previous research, the attitudinal and behavioral outcomes of job embeddedness may not have been reflective of the entire sample. For example, previous research found that internal social capital declines over time in managers who are embedded in their jobs (Ng. & Feldman, 2010). If this research had considered the employees' organizational identification, they may have found that those managers strongly identifying with the organization were maintaining or even increasing social capital as compared to those managers who were less identified.

Although I find sufficient evidence to support my contentions in general, the evidence is tenuous and more research is needed to substantiate these results. I would suggest several avenues for future research. First, due to multicollinearity, organizational identification may not be the optimum variable to reflect the idea that a person is in a favorable work situation. Likewise, an unfavorable work situation might be better reflected with a variable other than disidentification. Future researchers should consider other moderators that might interact with job embeddedness and further demonstrate that the employee's view of his/her job embeddedness is the important factor in various outcomes. For example, perceived organizational support has been found to be positively related to the favorableness of working conditions (Eisenberger, Cummings, Armeli, & Lynch, 1997), so it might be better used as a moderator in future job embeddedness research to reflect a favorable work situation. Job embeddedness impacted the relationships between LMX and performance as well as OBSE and performance (Sekiguchi et al., 2008), and it is likely that job embeddedness relationships might be impacted by LMX and/or OBSE as well. Second, other outcomes need to be investigated. Research indicates that family life and work life are closely knit together with conflict overlapping between the home and family and vice-a-versa. If a person is embedded in his/her job, he/she may have additional responsibilities, may spend additional time maintaining social links and ensuring job employability which in turn may be seen as difficult when equal demands are placed on the employee by family. Thus, it is likely that job embeddedness is

positively related to work-family conflict and family-work conflict (Ng & Feldman, in press). Likewise, research has shown that there can be positive consequences for the job and family resulting from the close ties between family and work (Carlson, Kacmar, Wayne, & Grzywacz, 2006). Therefore, as people become more embedded in their jobs, the positive experiences they have at work resulting from good fit and social networks may positively enhance family life resulting in job embeddedness being positively related to work-family enrichment and family-work enrichment.

## 6.4 Limitations

### *6.4.1 Sample*

The results of this research may not be generalizable across all situations. This sample came from a hospital, and gender was positively skewed toward females. The institution is a faith-based institution, owned and operated by a religious organization. Although religious affiliation is not required for employment, some of the employees are members of the church, and many of those who are not members still associate themselves with Christianity. This factor may impact the attitudes of the employees. For example, in the qualitative interviews that were performed, it was noted that employees in general identified with and were extremely loyal to the institution. Some of this loyalty may have been due to working in a place where organizational values (Christian values) were congruent with personal values. Some indicated that they appreciated working in a place where they could openly share their religious faith with others. There were not many reasons why people would leave the institution; even salary increases were not reason enough for people to leave, except in cases where financial situations dictated leaving for more money. Turnover among the sample, collected one year after the survey, was 12.5% which is low compared to the 2011 national average of 14.6% (Nursing Solutions, Inc., 2012). Thus, a high level of organizational identification already exists in this institution that may not exist in others and could result in some range restriction.

Although sample size was adequate, the response rate was borderline. Baruch and Holtom (2008) suggest that in previous organizational research, response rates for most populations is about 50% and that current research response rates should be within 1 standard deviation (about 20%). They further suggested that any downward deviation from the average should be explained. To reduce coverage and non-response error in this study, a mixed-mode of survey delivery was used (mail and electronic), incentives were offered and reminders to complete the survey were sent. Differences between the respondents and non-respondents were not tested because demographic data was not available on those who did not complete the survey, and, thus, some non-response error is possible. Taken together, it is problematic to conclude with certainty that these results are representative of the organization's complete population.

#### *6.4.2 Method*

The data for this research was collected using online surveys using work email addresses. However, there are employees there who do not have access to computers for their work or who do not require work email addresses. In order to try to be sure all employees had a chance to participate, I additionally sent out surveys by mail to home addresses. Still, some employees may not have received either an email or the mailed survey, precluding them from the chance to participate.

Additionally, it is possible there may have been some bias associated with common method variance (CMV). The survey was self-report and the same individual reported both independent variables and dependent variables. Efforts were made to reduce CMV including counterbalancing questions order, protecting respondent anonymity, reducing evaluation apprehension and collecting data at two points in time. However, although the independent variables and moderators were collected at Time 1 and the dependent variables were collected at Time 2, there was only a 4-6 week separation of the two time periods. Podsakoff, MacKenzie, Lee and Podsakoff (2003) suggest that temporal separation is an effective



technique for reducing CMV. They did not discuss the amount of time necessary, and one might question if six weeks separation is enough to control bias between the two points in time. It is common in job embeddedness research to find separations of 4 months, 5 months and longer (Mitchell et al., 2001; Ng & Feldman, 2010; Ng & Feldman, in press) while some research uses separation times as small as 4-6 weeks (Crossley & Stanton, 2005; Crossley et al., 2007). However, in general, the separation between times in this current research may be a little short resulting in some common method bias.

To check for common method bias, a single unmeasured latent method test was performed in SEM as recommended using the decision tree provided by Podsakoff et al. (2003). An unmeasured latent variable was added to the hypothesized model and all items were allowed to load on it. Fit statistics for the hypothesized model ( $\chi^2 = 1197.47$ ,  $df=390$ , CFI = .92, IFI = .92, RMSEA = .07, SRMR = .045) were compared with the fit statistics for the model with the unmeasured latent variable ( $\chi^2 = 854.85$ ,  $df=360$ , CFI = .95, IFI = .95, RMSEA = .06, SRMR = .042) and the variances attributed to the traits and the unmeasured latent method variable were calculated. The model with the unmeasured latent method variable fit the data better ( $\chi^2$  difference = 342.62,  $p<.01$ ) than the measurement model. However, the percentage of variance attributed to method was only 1.9% in comparison to 70.2% of variance attributed to traits. These results suggest that observed findings from this current study are not likely impacted by common method bias.

#### *6.4.3 Multicollinearity*

A potential problem in this study is the multicollinearity between job embeddedness and organizational identification. As aforementioned, two predictor variables highly correlated with each other can cause some confusing results and make interpretation difficult. Because of the suppression effects that can occur, each of the suspected regressions were analyzed to check for suppression effects (see Table 6.1), and only the regression for H5 showed evidence of organizational identification acting as a suppressor variable.

Table 6.1 Suppression Effects in Regression Analysis

DV	$r_{X_1X_2}$	$By_{X_1}$	$By_{X_1.X_2}$	$By_{X_2}$	$By_{X_2.X_1}$	
1. Internal SC	.600	.724	.355	.472	.374	$x_1=Je, x_2=Org ID$
2. External SC	-.422	.590	.631	-.069	.082	$x_1=Je, x_2=Org DisID$
3. Specific HC	.600	.574	.249	.398	.329	$x_1=Je, x_2=Org ID$
4. General HC	-.422	.268	.290	-.022	.038	$x_1=Je, x_2=Org DisID$

Note.  $r_{X_1X_2}$  is the correlation coefficient between the predictor  $X_1$  and the predictor  $X_2$ .

$-By_{X_1}$  is the standardized bivariate coefficient for the regression of the criterion  $Y$  on the predictor  $X_1$ .

$-By_{X_1.X_2}$  is the standardized partial coefficient for the regression of the criterion  $Y$  on the predictor  $X_1$  when the predictor  $X_2$  is also included in the regression.

$-By_{X_2}$  is the standardized bivariate coefficient for the regression of the criterion  $Y$  on the predictor  $X_2$ .

$-By_{X_2.X_1}$  is the standardized partial coefficient for the regression of the criterion  $Y$  on the predictor  $X_2$  when the predictor  $X_1$  is also included in the regression.

At first look, it would appear that regressing external social capital on job embeddedness and organizational disidentification creates a suppressor situation. However, organizational disidentification was not a significant predictor of external social capital, which would be required to make it a suppressor situation (Paulhus et al., 2004).

#### 6.4.4 The Measure of Job Embeddedness

The job embeddedness measure has issues that need to be dealt with. A recent article (Zhang, Fried, & Griffeth, 2012) pointed out some issues with the current measures that are important to the current research. First, there are conceptualization and measurement problems with the community (off-the-job) measure as a whole. Pertaining to this research, the term “community” and “area” are used numerous times in the off-the-job embeddedness measure. This term can be interpreted broadly to mean a very small area around you (maybe a neighborhood) or a very large area (the city, state or region where you live). The term needs to be more specific. Additionally, Zhang et al. (2012) noted that in turnover research, off-the-job embeddedness is unstable as a predictor providing many conflicting results and suggested that there are moderators in the relationship (e.g., commute time, nearby job types, and financial

requirements) that have to be considered. This suggestion lends credence to the idea that job embeddedness relationships in general can depend on moderators – such as how you view your job embeddedness. Second, Zhang et al. (2012) also noted that the measure of links is insufficient. Simply measuring the number of links will not accurately measure people's connections in and out of the workplace. They suggest that the structural characteristics (size, strength, range, network density, centrality, etc.) and the quality of the links need to be assessed as well. Thirdly, there are discriminate validity issues between two of the components (fit and sacrifice) in the measure. Fit and sacrifice are typically highly correlated and they may be mixed. For example, being a good fit with the organization may be viewed as positive, and, thus, losing this fit would be a sacrifice associated with leaving. Conversely, having a lot of freedom on the job (a sacrifice item) could be part of the organization's culture (i.e., results-oriented work environment) that the employee perceives fit with. However, they additionally noted that when items are aggregated to a complete job embeddedness score (as I have done in the current research), these discriminate validity issues have relatively little impact.

#### *6.4.5 Human Capital Measures*

The specific human capital and general human capital scales had to be created since there were no reflective scales for specific and human capital in previous research. The development of these items fit the needs of this specific research, but more rigor is needed in developing these scales in the future. More items should have been generated, the help of experts should have been consulted, and more rigorous content validity studies could have been done in order to better develop the scales representing these constructs. Although these scales were researched and developed based on other intellectual capital and employee development activity scales (Birdi, Allan, & Warr, 1997; Subramaniam & Youndt, 2005), were pilot tested, and had good internal validity, the results need to be interpreted with caution. For example, general and specific human capital was not significantly correlated (.08). You would

expect that since specific human capital and general human capital are both parts of overall human capital that they would be related to some extent.

#### 6.5 Conclusion

The purpose of this dissertation was threefold. First, I sought to add to limited literature extending job embeddedness to outcomes other than turnover and absenteeism. The evidence suggests that human capital and social capital are positively related to job embeddedness. Second, no previous job embeddedness research looked at the differences between specific and general human capital. Although not all of the interactions between organizational identification and job embeddedness operated as expected, there was evidence to suggest that the relationship between job embeddedness and specific and general human capital vary as a function of organizational identification. Third, and most important, I sought to address the issue of inconsistent results in literature and offer a reason and solution. Specifically, I contended that job embeddedness can lead to different types of workplace behaviors and outcomes depending on whether employees are positively or negatively identified with their organization. The current research supports this contention providing evidence that as individuals become more embedded in their jobs, internal social capital is increased and the relationship is strongest among those who identify with their organizations. Overall, the current research suggests that job embeddedness in itself is not the only important variable. How the individual views that job embeddedness, assessed in this study by his/her organizational identification, will ultimately influence the outcomes associated with embeddedness.

APPENDIX A

ELECTRONIC INVITATION TO PARTICIPATE IN SURVEY AT TIME 1

Dear <Subject Name>,

We are currently conducting research into health care industry employee attitudes and outcomes. This survey should take about 10 minutes to complete, though some people will complete it more quickly and others may take longer. In order to participate, simply open the link below and input your password.

<link to survey>

Your Password: <discrete password>

This research occurs in two phases. Volunteers will be asked to complete this survey and a follow-up survey that will come 30-60 days later. In addition to our great appreciation for your participation, all those who fully participate in this research will be entered into a lottery for chance to win gift cards. Twelve drawings will be held. Five participants will win a \$15 Visa gift card; five participants will win a \$20 Visa gift card; one participant will win a \$50 Visa gift card and one participant will receive the grand prize of a \$100 Visa gift card

This study is being conducted among employees at <organization name>. The purpose of this research is to explore the health care industry employee attitudes and outcomes. Ultimately, we hope to publish the findings of this study in an academic journal. Should you have any questions regarding this research, please contact the principal researcher Aaron Moses by cell phone at (817) 240-3001, or by email at [amoses@uta.edu](mailto:amoses@uta.edu). You may also contact his advisor, Dr. George Benson by email at [benson@uta.edu](mailto:benson@uta.edu).

This research has been approved by the administration at <organization name> and the administration of UT Arlington's Institutional Review Board (IRB). Approval documentation is available upon request.

All data collected in this survey will be held in the strictest confidence. No individual responses will be published or shared. All data will be aggregated for the purposes of publication and reporting.

I know this is a busy time for everyone. We are most thankful for your time and your response.

With appreciation,

Aaron Moses  
Doctoral Candidate  
Department of Management  
College of Business  
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George Benson  
Associate Professor  
Department of Management  
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University of Texas at Arlington  
[benson@uta.edu](mailto:benson@uta.edu)

APPENDIX B

MAILED INVITATION TO PARTICIPATE IN SURVEY AT TIME 1

Dear <Subject Name>,

We are currently conducting research into health care industry employee attitudes and outcomes. This survey should take about 10 minutes to complete, though some people will complete it more quickly and others may take longer. You may participate in one of two ways. (1) Complete the enclosed paper survey and mail it back in the postage paid envelope, or (2) go to the following website and use the password below to access the online survey.

<link to survey>

Password: <discrete password>

This research occurs in two phases. Volunteers will be asked to complete this survey and a follow-up survey that will come 30-60 days later. In addition to our great appreciation for your participation, all those who fully participate in this research will be entered into a lottery for chance to win gift cards. Twelve drawings will be held. Five participants will win a \$15 Visa gift card; five participants will win a \$20 Visa gift card; one participant will win a \$50 Visa gift card and one participant will receive the grand prize of a \$100 Visa gift card.

This study is being conducted among employees at <organization name>. The purpose of this research is to explore the health care industry employee attitudes and outcomes. Ultimately, we hope to publish the findings of this study in an academic journal. Should you have any questions regarding this research, please contact the principal researcher Aaron Moses by cell phone at (817) 240-3001, or by email at [amoses@uta.edu](mailto:amoses@uta.edu). You may also contact his advisor, Dr. George Benson by email at [benson@uta.edu](mailto:benson@uta.edu).

This research has been approved by the administration at <organization name> and the administration of UT Arlington's Institutional Review Board (IRB). Approval documentation is available upon request.

All data collected in this survey will be held in the strictest confidence. No individual responses will be published or shared. All data will be aggregated for the purposes of publication and reporting.

I know this is a busy time for everyone. We are most thankful for your time and your response.

With appreciation,

Aaron Moses  
Doctoral Candidate  
Department of Management  
College of Business  
University of Texas at Arlington  
[amoses@uta.edu](mailto:amoses@uta.edu)

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Associate Professor  
Department of Management  
College of Business  
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[benson@uta.edu](mailto:benson@uta.edu)



APPENDIX C  
INFORMED CONSENT

### **Informed Consent Form**

You are being asked to participate in a research project being conducted by a principal investigator, Aaron Moses, a Ph.D. candidate under the supervision of Dr. George Benson in the Department of Management, University of Texas at Arlington. The purpose of this study is to examine health care industry employee attitudes and outcomes related to human resource management practices. Ultimately, we hope to publish the findings of this study in an academic journal.

### **Procedure**

For this study, you will complete surveys at two times. The surveys will be conducted electronically through Qualtrics.com or you may fill out the paper survey sent to your home address and return it in the postage paid envelope.

### **Time 1 (today)**

You will be asked to report information related to your work and your community. The survey should take about 10-15 minutes to complete, though some people will complete it more quickly and others may take longer.

### **Time 2 (30-60 days later)**

You will be asked to report additional work behaviors and perceptions. It will take about 10-15 minutes to complete the survey, though some people will complete it more quickly and others may take longer.

### **Benefits of research participation**

Your survey will contribute to the management literature.

### **Compensation**

**Among the enrolled participants who complete both T1 and T2 surveys, 12 participants will be randomly drawn and will be given Visa gift cards. The first prize is one \$100 Visa gift card, second prize is one \$50 Visa gift card. There are 5 \$20 Visa gift cards for a third place drawing, and five \$15 Visa gift cards for a 4th place drawing.**

### **Rights and risks**

Participation in this survey is entirely voluntary and choosing to participate or not has no effect on your employment. You do not need to answer any questions that you do not wish to and you may stop completing the survey at any point. This survey is completely confidential. Each respondent will be provided a unique discrete password to enable surveys to be matched. The names and passwords will be stored in a database (the "Key") on a separate password protected computer. After surveys are matched, the Key will be destroyed and there will remain no record which connects the data to any individual. No individual data will be shared with *<organization name>*. Therefore, your responses will remain safe and confidential. Your responses will be saved in an Excel file in the principal investigator's computer. It will not be accessible to anyone but the investigator. All data will be aggregated for the purpose of publication and reporting.

There is no physical or psychological risk resulting from answering the questions. To ensure confidentiality, please do not put your name on the survey. If you have any questions about this study and your rights, please contact Aaron Moses at amoses@uta.edu or 817-272-3851, or Dr. George Benson at benson@uta.edu.

APPENDIX D

ELECTRONIC INVITATION TO PARTICIPATE IN SURVEY AT TIME 2

Dear <Subject Name>,

A few weeks ago, you were kind enough to respond to an electronic survey. You may remember that this is research into health care industry employee attitudes and outcomes.

As we informed you then, we are now sending you a new link for the follow-up survey. This survey is shorter than the first one and should take about 10 minutes to complete, though some people will complete it more quickly and others may take longer.

Some questions may seem similar to the ones in the first survey, but many of them are worded differently. Please read them carefully. If you have technical problems with the online survey, please call Aaron Moses at 817-240-3001(cell) immediately or email me at [amoses@uta.edu](mailto:amoses@uta.edu) for assistance.

In order to participate, simply open the link below and input your password.

Your Password Is:        <discrete password>  
                                 <link to survey>

In addition to our great appreciation for your participation, all those who fully participate in this research by completing both surveys, will be entered into a lottery for a chance to win gift cards. **Twelve drawings will be held. Five participants will win a \$15 Visa gift card; five participants will win a \$20 Visa gift card; one participant will win a \$50 Visa gift card and one participant will receive the grand prize of a \$100 Visa gift card.**

Should you have any questions regarding this research, please contact Aaron Moses by phone at 817-240-3001(cell) or by email at [amoses@uta.edu](mailto:amoses@uta.edu).

This research has been approved by the administration at <organization name> and the administration of UT Arlington's Institutional Review Board (IRB). Approval documentation is available upon request.

All data collected in this survey will be held in the strictest confidence. No individual responses will be published or shared. All data will be combined prior to analysis for the purposes of publication and reporting.

I know this is a busy time for everyone. I am most thankful for your time and your response. With appreciation,

Aaron Moses  
Doctoral Candidate  
Department of Management  
College of Business  
University of Texas at Arlington  
[amoses@uta.edu](mailto:amoses@uta.edu)

APPENDIX E

MAILED INVITATION TO PARTICIPATE IN SURVEY AT TIME 2

Dear <Subject Name>,

A few weeks ago, you were kind enough to respond to a survey. You may remember that this is research into health care industry employee attitudes and outcomes.

This survey is shorter than the first one and should take about 10 minutes to complete, though some people will complete it more quickly and others may take longer. Some questions may seem similar to the ones in the first survey, but many of them are worded differently. Please read them carefully.

You may participate in one of two ways, (1) complete the enclosed paper survey and mail it back in the postage paid envelope, or (2) go to the following website and use the password below to access the online survey. Using the online survey will save the researcher money and time, but please use the paper survey if you prefer that. If you have technical problems with the online survey, please call Aaron Moses at 817-240-3001 (cell) immediately for assistance.

Your Password Is:           <discrete password>  
  <link to survey>

In addition to our great appreciation for your participation, all those who fully participate in this research by completing both surveys, will be entered into a lottery for a chance to win gift cards. **Twelve drawings will be held. Five participants will win a \$15 Visa gift card; five participants will win a \$20 Visa gift card; one participant will win a \$50 Visa gift card and one participant will receive the grand prize of a \$100 Visa gift card.**

Should you have any questions regarding this research, please contact Aaron Moses by phone at 817-240-3001 (cell) or by email at [amoses@uta.edu](mailto:amoses@uta.edu).

This research has been approved by the administration at <organization name> and the administration of UT Arlington's Institutional Review Board (IRB). Approval documentation is available upon request.

All data collected in this survey will be held in the strictest confidence. No individual responses will be published or shared. All data will be combined prior to analysis for the purposes of publication and reporting.

I know this is a busy time for everyone. I am most thankful for your time and your response. With appreciation,

Aaron Moses

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[amoses@uta.edu](mailto:amoses@uta.edu)

APPENDIX F  
MEASUREMENT SCALE ITEMS

### **Job Embeddedness Scale (Holtom et al., 2006)**

#### Fit-Organization

1. My job utilizes my skills and talents well.
2. I feel like I am a good match for this organization.
3. If I stay with this organization, I will be able to achieve most of my goals.

#### Fit-Community

4. I really love the place where I live.
5. This community is a good match for me.
6. The area where I live offers the leisure activities that I like (sports, outdoors, cultural, arts).

#### Links-Organization

7. How many coworkers do you interact with regularly?
8. How many coworkers are highly dependent on you?
9. How many work teams are you on?

#### Links-Community

10. Are you currently married?
11. If you are married, does your spouse work outside the home?
12. Do you own the home you live in? (mortgaged or outright).

#### Sacrifice-Organization

13. I have a lot of freedom on this job to decide how to pursue my goals.
14. I would sacrifice a lot if I left this job.
15. I believe the prospects for continuing employment with this organization are excellent.

#### Sacrifice-Community

16. Leaving this community would be very hard.
17. If I were to leave the community, I would miss my non-work friends.
18. If I were to leave the community, I would miss my neighborhood.

### **Human Capital**

These items were created for this study. The original items were validated in April, after which slight changes were made to specific human capital items. The changed items were run in the Time 1 data collection in order to be validated for the Time 2.

#### Specific Human Capital

1. I have many skills that are specific to <organization name>.
2. I have much knowledge that is specific to <organization name>.
3. I have expertise in a specialized area that is specific to <organization name>.
4. I have knowledge about policies, procedures or processes that are specific to <organization name>.
5. I have knowledge, skills and training from mentoring and/or coaching that is specific to <organization name>.

#### General Human Capital

6. I have skills that are marketable in a wide variety of organizations.
7. My skills are broadly marketable.
8. I have skills and knowledge that are highly valued in a broad range of industries.
9. I have broad professional skills and knowledge.
10. I have education that would be valued by many organizations.

### **Social Capital (Ferris et al., 2005; Ng & Feldman, 2010)**

#### Internal Social Capital

1. I spend a lot of time and effort at work networking with others.
2. I am good at building relationships with influential people at work.
3. At work, I know a lot of important people and am well connected.
4. I spend a lot of time at work developing connections with others.



5. I am good at using my connections and network to make things happen at work.
6. I have developed a large network of colleagues and associates at work whom I can call on for support when I really need to get things done.

External Social Capital

1. I spend a lot of time and effort networking with others in my occupation.
2. I am good at building relationships with influential people in my occupation.
3. In my occupation, I know a lot of important people and am well connected.
4. I spend a lot of time developing connections with others in my occupation.
5. I am good at using my connections and network in this occupation to make things happen for my career.
6. I have developed a large network of colleagues and associates in my occupation whom I can call on for support when I really need to get things done.

**Organizational Identification (Mael, 1988; Mael & Ashforth, 1992; 1995)**

1. When someone criticizes (name of organization), it feels like a personal insult.
2. I am very interested in what others think about (name of organization).
3. When I talk about (name of organization), I usually say “we” rather than “they”
4. (name of organization) successes are my successes.
5. When someone praises (name of organization), it feels like a personal compliment.
6. If a story in the media criticized (name of organization), I would feel embarrassed.\*

**Organizational Disidentification (Kreiner & Ashforth, 2004)**

1. I am embarrassed to be part of this organization.\*
2. This organization does shameful things.
3. I have tried to keep the organization I work for a secret from people I meet.
4. I find this organization to be disgraceful.
5. I want people to know that I disagree with how this organization behaves.
6. I have been ashamed of what goes on in this organization.

\*Items deleted from final scale.

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