An Achievement Goal Framework for Understanding the Learning-Performance Tension in Short-term Jobs

A Dissertation Presented

by

Gerard Beenen

In Partial Fulfillment of the Requirements for the Degree
Doctor of Philosophy in Organizational Behavior and Theory

Tepper School of Business
Carnegie Mellon University
August 2008

Dissertation Committee

Professor Paul Goodman (Co-chair), Carnegie Mellon University

Professor Denise Rousseau (Co-chair), Carnegie Mellon University

Professor Mark Fichman, Carnegie Mellon University

Professor Carrie Leana, University of Pittsburgh

ABSTRACT

Drawing from achievement goal and socialization literatures, I develop and test a theoretical model to explain how both learning and performance occur in short-term jobs in which workers lack experience yet have substantial responsibility. Goal orientations are hypothesized to motivate self-regulation activities (e.g., feedback seeking, learning strategies) which in turn affect worker learning and performance. Organizational factors, including supervisor goal orientations and socialization tactics, also lead to self-regulation activities that affect learning and performance. The model is tested in a longitudinal study of 475 MBA interns from 10 schools. As predicted, worker and supervisor goal orientations, and socialization tactics, explain unique variance in worker learning and performance. These effects were at least partially mediated by worker self-regulation activities. Workers with learning and performance goals who had learning-oriented supervisors, and who experienced socialization tactics, had the most positive learning and performance outcomes. This study contributes to achievement goal research by showing two kinds of learning goal orientations (one focused on skills, another on employer knowledge) predicted different kinds of activities and learning outcomes, and by showing both learning and performance goal orientations are adaptive for short-term workers. This study adds to research on proactive socialization by demonstrating worker goal orientations are an important antecedent to newcomer learning and performance. It also fills a gap in the newcomer socialization literature by focusing on short-term workers who lack prior experience yet have substantial responsibilities. Short-term workers and their employers can benefit from this study's findings by aligning individual and supervisor goal orientations, and organizational socialization practices, with specific learning and performance outcomes.

To the memory of my father, Henri Beenen.

ACKNOWLEDGEMENTS

I am especially grateful to Paul Goodman for his friendship and bottomless reservoir of support during the writing of this dissertation, and to Denise Rousseau for her persistent optimism and encouragement. Mark Fichman's crisp comments were always helpful, and often witty. Thanks to Carrie Leana at the University of Pittsburgh for serving on my committee from the other side of the bridge. My first summer thesis launched my research interest in goals and motivation. Thanks to Bob Kraut and Laurie Weingart for advising me on that project.

The Graduate Management Admissions Council (GMAC) provided financial support for this dissertation through their Management Education and Research Institute (MERI). Thanks to Rachel Eddington at GMAC for administering the MERI dissertation fellowship program. I also am indebted to Ken Keeley, Director of Career Services at the Tepper School. He introduced me to his career services colleagues at other MBA programs, whose cooperation was essential for this study. The Tepper School's Ph.D. program manager, Lawrence Rapp, has always been available to answer questions with service-oriented professionalism. Every organization needs more people like Lawrence.

Several faithful friends who preceded me to a Ph.D. were always available to offer encouragement through the dissertation process. These include Ian Ferguson (Georgia Tech), Craig Rusch, (Vanguard University), Mark Kennedy (University of Southern California), and Bruce Kawasawa (Veteran's Administration). Thanks guys.

Finally, I am most grateful to my wife and best friend, Eun Neyer Beenen. Amidst the challenges of parenting our kids, she provided continual love and support. Thanks for helping me fulfill my dream, sweetheart.

TABLE OF CONTENTS

Chapter 4: Research Methods

Chapter 5: Analysis and Results

Chapter 6: Discussion, Conclusions, Limitations and Contributions

Chapter 1: Introduction- How can People both Learn and Perform in a Short-Term Job?

1.1 Overview

This dissertation develops and tests theory to understand how people can both learn and perform effectively in a short-term job where they have substantial responsibility yet lack prior experience. This is an important topic because there is an inherent tension between learning and performance when people have a short amount of time to achieve both outcomes. Performing effectively in a job requires prior experience and learning (e.g., Quinones, Ford & Teachout, 1995). Yet people in short-term jobs commonly are under pressure to prove they can perform well, despite their lack of prior experience.

For example, a medical intern who is about to start a new rotation has to learn how to diagnose and treat patients in a short amount of time. Yet, superiors and the professional system in which physician training occurs place extreme pressure on residents to perform clinical duties autonomously and efficiently (Hoff, Pohl & Bartfield, 2006). A short-term independent consultant who lacks prior experience on a new project needs to learn new technical skills in order to successfully perform the work. Concurrently, the contracting organization expects the consultant to be technically competent and to finish the job on time and within budget in order to be a viable candidate for follow-up work (O'Mahony & Bechky, 2006). An MBA intern with no prior finance experience has 8 weeks to learn new skills, and to learn about being an investment banker. Yet, his prospects for a full-time job offer at the end of 8 weeks will be based on his job performance, not on how much he learned.

In each example, people are under pressure from supervisors and employers to prove they can perform in a short amount of time. Yet in order to perform well, they need to learn new

skills. Studies using short-term work simulations have shown that when people who lack experience on a task are under pressure to both learn and perform, they are less effective at achieving either outcome (e.g., Kanfer & Ackerman, 1989; Seijts, Latham, Tasa & Latham, 2004). The organizational literature has not directly investigated the tensions and potential conflicts between learning and performance in actual short-term jobs.

1.2 Defining short-term jobs

Short-term or temporary jobs can include a variety of work forms that are distinct from permanent jobs (Ashford, George & Blatt, 2008). The kinds of short-term jobs most frequently studied in the literature are temporary or contingent work forms that may include part-time positions at lower levels of an organization (e.g., Broshak & Davis-Blake, 2006). This dissertation focuses on short-term jobs that are a full-time form of employment about 8-12 weeks long, with substantial job responsibilities that are consistent with the job holder's professional goals and aspirations (cf. Ashforth, 2001: 42-49). Other examples of short-term jobs (in addition to the three prior examples) are professional school internships (e.g., engineering, law, social work), management rotation programs, and interim managers (Inkson, Heising & Rousseau, 2001).

1.3 Research Questions

These tensions and potential conflicts between individual learning and performance in a short-term job raise two research questions which are the focus of this dissertation: 1) How can people both learn and perform in a short-term job in which they lack experience? 2) Are learning and performance conflicting or complementary goals for people in short-term jobs?

Two literatures offer guidance in answering both questions. First, the achievement goal literature examines how people's motivation to learn and perform affects their proactive pursuit of each outcome (Dweck, 1986; Elliot, 2005; Elliot & Church, 1997; for a review see Payne, Youngcourt & Beaubien, 2007). This literature provides insight on the tensions that emerge when people pursue both learning and performance goals. Second, the newcomer socialization literature examines how people learn and adapt to a new work role (for reviews see Bauer, Bodner, Erdogan, Truxillo & Tucker, 2007; Saks & Ashforth, 1997a). This literature provides some insight on how organizational training processes and newcomers' proactive behaviors affect their learning and performance outcomes.

1.4 Motivation

Understanding how individual learning and performance can occur in a short-term job is an important research focus for two reasons: 1) it addresses key issues that are not yet adequately covered in organizational research; 2) it informs theory development on how individual learning and performance are achieved in a variety of short-term work settings.

First, the individual and organizational mechanisms that affect individual learning and performance in a short-term job are rarely addressed in organizational literature, and have not been adequately addressed in the achievement goal and newcomer socialization literatures. The achievement goal literature has focused on people who already are functioning in their jobs, not people who are starting new jobs. The need to learn and perform should be especially salient to people who are relatively inexperienced, and have a short amount of time to prove themselves in a new job. Achievement goal researchers also have called for studies addressing the tensions and potential conflicts between learning and performance goals (Fryer & Elliot, 2007).The newcomer

socialization literature has examined how people learn and perform in new roles under a general assumption that the transition from "newcomer" to "old timer" is a 6-12 month process (e.g., Callister, Kramer & Turban, 1999). In short-term jobs, people may need to learn and perform within weeks, not months. Socialization scholars recognize that a role's duration is an important limitation of prior studies and have called for research on short-term jobs (Bauer et. al., 1998: 187-190; Saks & Ashworth, 1997a: 272).

Second, the topic of how learning and performance can occur in a new job in a short amount of time is relevant in many organizational settings. Baby boomers (people born 1957 to 1964) average two years with an employer by the time they reach 42, with 31% of jobs for those between the ages of 38 to 42 lasting less than one year (U.S. Department of Labor, 2008). Each new job may require people to learn new skills and to achieve new performance standards. People also need to learn and perform in a short amount of time following a job transfer or work reassignment. For example, a manager may change functional specializations while continuing to work for the same employer or a consultant may change clients while working for the same firm. How people can both learn and perform in a short amount of time is an important topic that warrants focused theory development and testing.

1.5 Contributions

This study makes three main contributions to organizational research and practice. First, it investigates how individuals can *both* learn and perform in a new job in a short amount of time. Because individual job performance is a more commonly studied outcome than learning in field settings, it is important to distinguish the two. In this dissertation learning is a change in a person's behavior or knowledge that occurs as a result of experience (Anderson, 2000; Weiss,

1990). Learning in one's job can positively affect a person's job performance (Levenson, Van der Stede & Cohen, 2006; Quinones et al. 1995), organizational commitment (Ng, Butts, Vandenberg, DeJoy & Wilson, 2006), and career success (Hall & Chandler 2005; Ng, Eby, Sorensen & Feldman, 2005). Performance is a person's level of proficiency in their job relative to their peers. The general tension between learning and performance has been examined in various contexts including organizational learning and performance (March, 1991), CEO learning experience and firm performance (e.g., Henderson, Miller & Hambrick, 2006), experience curves and performance (e.g., Reagans, Argote & Brooks, 2005), and learning and performance goals in experimental tasks (e.g., Barron & Harakaciewz, 2001; Kozlowski & Bell, 2006; Kanfer & Ackerman, 1989; Seijts et al., 2004) and educational settings (e.g, Fryer & Elliot, 2007). How people both learn and perform in a new job is a short amount of time is less commonly studied in field settings (cf. Hill, 2003 for a partial exception). A literature on employee training offers some insight on the tension (for a review see Salas & Canon-Bowers, 2001). The training literature, however, generally focuses on off-the job employee training, not people in short-term jobs. Socialization research which focuses exclusively on how people learn and adapt to new work roles has "not consistently examined the role of learning" (Bauer et al., 2007: 718). Socialization studies more typically measure general "task mastery" outcomes (which conflate learning and performance) rather than changes in specific skills (e.g., Gruman, Saks & Zweig, 2006; Morrison, 1993a,b). This study addresses how people in short-term jobs can both learn and perform as distinct outcomes. It also distinguishes between how they learn specific managerial skills, and how they learn specific knowledge about their employer.

Second, this study integrates achievement goal and newcomer socialization literatures to obtain insights on how people proactively learn and perform in a new job. The achievement goal

literature investigates how people's preference for learning and performance affects their proactive pursuit of each aim. The newcomer socialization literature investigates how organizational actions and newcomer proactive behaviors affect their learning and performance in a new role. This study is the first to integrate insights from both literatures in order to develop and test a model of how people's learning and performance goal preferences, proactive behaviors, and organizational settings affect their learning and performance outcomes in a short amount of time (i.e., 8-12 weeks).

Third, this study contributes to organizational practice by shedding light on a topic that is important to both employees and employers: "Getting new hires up to speed quickly" (Rollag, Parise & Cross, 2005). Given the challenges of concurrently achieving both learning and performance outcomes in a new job, both individuals and employers should benefit from insights on the individual and organizational mechanisms that affect both outcomes. Understanding how people can both learn and perform in a short-term job has broader implications for helping organizations and new employees to rapidly learn and perform their jobs, or what the popular literature calls "onboarding."

1.6 Dissertation Outline

The rest of this dissertation reviews literatures on achievement goals and newcomer socialization to lay a foundation for the contribution of each literature to our understanding of learning and performance in short-term jobs, and to identify current issues in each literature that this dissertation addresses (Chapter 2). Next, a theoretical model is presented which includes 12 hypotheses explaining how individual, supervisory, and organizational factors affect people's learning and performance in a short-term job (Chapter 3). The research context, design,

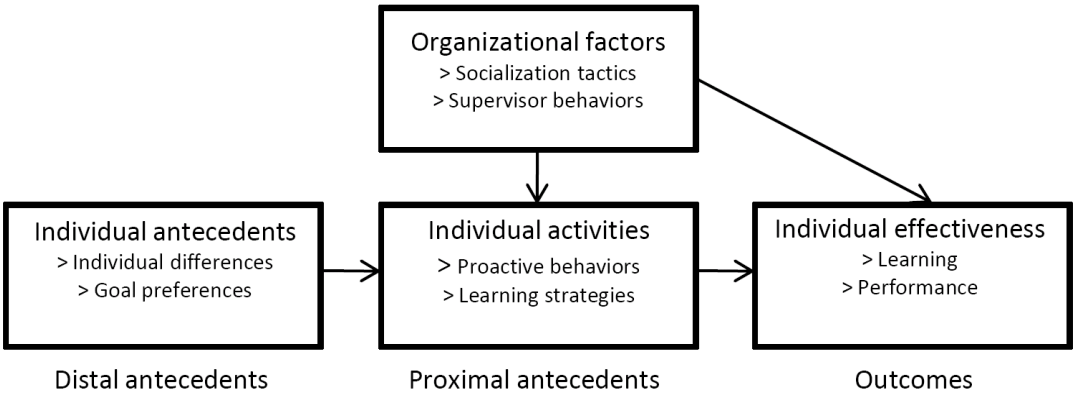
procedures, and measures used to collect data on a longitudinal sample of MBA interns is presented (Chapter 4), followed by the results of the hypotheses using ordinary least squares regression (Chapter 5). Finally, the pattern of findings are summarized and discussed, along with their implications for the theoretical model, future research, and organizational practice (chapter 6).

Chapter 2: Review of Achievement Goal and Newcomer Socialization Literatures

2.1 Overview

In this section I review findings in the achievement goal and newcomer socialization literatures as they pertain to learning and performance in short term jobs. The achievement goal literature provides a basis for understanding learning and performance as goal orientations that energize people's pursuit of each outcome. It also helps frame our understanding of each as conflicting or complementary goals. Though most achievement goal research has been done in experimental and educational settings, this review focuses on issues relevant for work settings, with brief attention to employee training studies. The newcomer socialization literature focuses on how organizational routines called socialization tactics and newcomer proactive behaviors help people adjust to new work roles. A sparse literature on internships also is briefly summarized. Figure 1 depicts the general model that frames the review. Distal antecedents

Figure 1: General Model for Individual Learning and Performance in a New Job



include individual characteristics such as big five traits, and learning and performance goal orientations. Proximal antecedents include individual factors (e.g., proactive behavior displayed in the job) and organizational factors that are related to peoples' proactive behaviors in a job, and learning and performance

A key difference between both literatures is achievement goal research generally views learning and performance goals as factors that can motivate potentially conflicting processes and behaviors. For example, people with learning goals may seek feedback to improve their skills, while people with performance goals may avoid seeking such feedback. Newcomer socialization research bypasses this tension by viewing learning as an antecedent to performance over a relatively lengthy entry period. For example, people may perform their new jobs well after a learning period of 6-12 months. Insights and gaps in both literatures informs this dissertation's theory development for understanding how learning and performance occur in short-term jobs.

2.2 Achievement Goal Literature Review

2.2.1 Defining learning and performance goal orientations

Goal orientations are cognitive frameworks that affect "how individuals approach, interpret, and respond to achievement activities" (Kozlowski & Bell, 2006: 902). The hierarchical model of achievement motivation organizes goal orientations by crossing goal content (learning or performance) with valence (approach or avoid) (Elliot & McGregor, 2001), resulting in four goal orientations (learning-approach, learning-avoid; performance-approach, performance avoid) [1]. Three goal orientations (excluding learning-avoid) are most prevalent in the literature and are the focus of this review[2] (Day, Yeo & Radosevich, 2003; Rawsthorne & Elliot, 1999). Learning-approach goals focus a person's attention, effort and behavior on self-development and competence improvement. Performance-approach goals focus a person on

[1] Learning goals sometimes are called mastery or task goals, and performance goals sometimes are called ego, outcome, or performance-prove goals. In this review the term "learning goals" refers to learning-approach goals.
[2] Learning-avoid goals focus on avoiding the loss of previously acquired competence (Elliot & McGregor, 2001; van Iyperen, 2006). This orientation is not reviewed here because of the limited work settings to which it applies, and because the achievement pattern for learning-avoid and performance-avoid goals are similar (VandeWalle, 2003).

being judged more competent than peers. Performance-avoid goals focus a person on avoiding being judged less competent than peers (Elliot & Church, 1997; VandeWalle, 1997). Thus learning and performance goals motivate people to pursue different standards of competence. Learning goals focus people on achieving internal standards of competence (self-improvement). Performance goals focus people on achieving external standards (normative comparison).

Goal orientations are more specific than traits, intentions, and motives (Elliot, 2005; Fryer & Elliot, 2007), and more general than challenging, specific goals (Locke & Latham, 2002). People adopt specific goal orientations in specific settings based on independent situational and dispositional factors. Strong situational cues such as experimental manipulations can influence people to adopt a specific orientation. For example, instructions introducing errors as learning opportunities induce a learning frame (Kozlowski & Bell, 2006). Dispositional factors also influence the type of orientation people choose to adopt in a specific setting, though goal orientations themselves are not traits (Dweck, 1986; Dweck & Legett, 1988; Elliot, 2005). For example, need for achievement is a dispositional antecedent to both learning and performance-approach orientations (Elliot, 2005; Fryer & Elliot, 2007). Researchers often miss this distinction and view people's own goal orientations as stable traits (e.g., Payne et al., 2007). Defining goal orientations as stable traits overlooks the nuance that people may choose to adopt different orientations across different settings. For example, a student may be learning-oriented in math, but not writing. This dissertation investigates this nuance by distinguishing learning goals focused on developing job-related skills (e.g., technical expertise in a functional area), from learning goals focused on acquiring knowledge about key features of their employer (e.g., promotion and reward systems). For simplicity, the commonly used label of "trait orientation" will be used for goal orientations that are affected by dispositional antecedents.

Each type of learning and performance goal orientation energizes goal pursuit through self-regulation (Kozlowski & Bell; 2006; Fryer & Elliot, 2007). Self-regulation refers to the processes that enable people to plan and guide their goal-directed activities over time and across situations (Karoly, 1993: 25). Self-regulation involves *monitoring* one's own thoughts and behaviors, *evaluating* one's progress against a desired standard, and *reacting* to one's progress by reallocating or withdrawing one's attention and effort (Kanfer & Ackerman, 1989). Though self-regulation processes include cognition, affect and behavior, the focus of this review is on the cognitions and behaviors activated by each orientation. Cognitions and behaviors explain how people pursue goal end states that are consistent with their orientations.

2.2.2 Cognitions, behaviors and outcomes associated with learning and performance goals

Each goal orientation is associated with its own pattern of cognitions, behaviors and consequences (see Payne et al, 2007). Generally, learning-approach goals are associated with a pattern of cognitions and behaviors that lead to learning, and to some extent, performance. Performance-avoid goals are associated with a pattern that impairs learning and performance. Performance-approach goals present a more mixed picture that is unrelated to learning, and motivates performance under some conditions more than others. This section addresses each orientation in greater detail.

Researchers generally agree learning goals motivate adaptive self-regulation (Elliot, 2005; Fryer & Elliot, 2007; Kozlowski & Bell, 2006; Payne et al., 2007). Learning-approach goals are associated with intrinsic motivation (Harackiewicz, Barron & Elliot, 1998), consistent with their focus on achieving internal (self-development) versus external (normative comparison) standards of competence (Elliot & Harackiewicz, 1996; Lee, Sheldon & Turban, 2003). It also is

consistent with the view that intrinsic (internalized) standards of competence are more effective at motivating people to learn and perform than extrinsic (externalized) standards (e.g., Fryer & Elliot, 2007; Gagne & Deci, 2005; Ryan & Deci, 2000). People who adopt learning goals display greater task persistence and effort, deeper processing of learning content (Elliot, McGregor & Gable, 1999; Lee et al, 2003), less procrastination (Wolters, 2004), and more proactive feedback and help seeking behavior (Linnenbrink, 2005; VandeWalle & Cummings, 1997)—all of which are positively related to learning. Some of these learning-oriented cognitions and behaviors (e.g., deeper processing, effort) can be classified as learning strategies, which are approaches people use to encode, store, organize and retrieve learning content (e.g., Ford, Smith, Weissbein, Gully & Salas, 1998) and enhance their performance (Payne et al., 2007). Learning strategies are commonly studied in educational or experimental settings. This study investigates how learning goals motivate people to use learning strategies to acquire skills in a new job.

The relationship of learning goals and performance varies across settings. Payne and colleagues' (2007) recent meta-analysis found trait learning goals across studies are most strongly associated with job performance (ρ=.18), and academic performance (ρ=.16) (though confidence intervals for each include zero), and not related to experimental task performance. State learning goals were related to job performance (ρ=.22), and not to academic or task performance (though this included only a few studies). Several factors may explain these varied results. First, people may experience more pressure to perform in a job than in experimental and academic settings. The fact that state learning goals had the strongest and least variable relationship to performance supports that. Another explanation is that learning goals help people perform better after they already have learned the skills needed to perform their jobs. In support

of this explanation, studies in work settings have focused on people who likely already had the skills to do their jobs. For example, Porath and Bateman (2006) found a relationship between learning goals and performance for sales people whose average tenure with their employers was 9.4 years. It is possible that learning goals help people who already have skills to do their jobs to maintain or improve their skills, thereby sustaining their performance. No studies have examined how goal orientations affect learning and performance for people in new jobs. This study will examine whether learning goal orientations will affect performance when people have a short amount of time to both learn and perform in a new job.

Researchers generally agree performance-avoid goals activate maladaptive cognitions and behaviors that can impair learning and performance. Performance-avoid goals are related to lower task persistence, procrastination, surface processing of learning content (Elliot, McGregor & Gable, 1999; Lee et al, 2003; Wolters, 2004), appraising achievement situations as threats rather than challenges (Church, Elliot & Gable, 2001; Elliot & McGregor, 1999), and help seeking avoidance (Middleton & Midgley, 1997; Porath & Bateman, 2006; VandeWalle & Cumings, 1997). Performance-avoid goals are negatively related to learning, and performance in academic and experimental settings (Payne et al, 2007), and negatively related to job performance in one study (Porath & Bateman, 2006).

Performance-approach goals are the most controversial because of their mixed effects on performance. Payne and colleagues (2007) meta-analytic review showed performance-approach trait goals across studies are unrelated to academic and task performance, and have a weak relationship (ρ =.09) to job performance (with a confidence level that includes zero). State performance-approach goals were associated only with task performance and job performance, though across fewer studies. The fact that performance goals appear to affect performance in

some settings and not in others may be due to their relationship to two distinct traits—need for achievement and fear of failure (Elliot & Church, 1997; Elliot & Thrash, 2002; Fryer & Elliot, 2007: 57). For example, consistent with need for achievement, performance-approach goals lead to greater task effort and performance when people have high task self-efficacy; consistent with fear of failure, performance-approach goals lead to withdrawal of effort and lower performance when people have low task self-efficacy (e.g., Grant & Dweck, 2003). Consequently, performance-approach goals share behavior patterns with learning goals including greater task effort and persistence (Elliot et al, 1999; Lee et al, 2005; Lopez, 1999), viewing achievement situations as challenges rather than threats (McGregor & Elliot, 2002), and help seeking in some studies (Park, Schmidt, Scheu & Deshon, 2007; Porath & Bateman, 2006; Tuckey, Brewer & Williamson, 2002). They also share behavior patterns with performance-avoid goals such as surface processing (Elliot et al, 1999; Lee et al, 2005), viewing achievement situations as threatening (McGregor & Elliot, 2002), , and avoidance of help seeking in the majority of studies (Karabenick, 2003; Payne et al., 2007; VandeWalle & Cumings, 1997). Another possible explanation for these variable effects on performance is that in short-term tasks, performance goals may provide a temporary boost in motivation (Elliot & Church, 1997). Over longer periods of time, they may lead to lower task effort and persistence by impairing intrinsic motivation (Harackiewicz, Barron & Elliot, 1998). In support of this explanation, state performance goals (which are situation-specific and shorter-term) have a stronger overall relationship to performance than trait goals (which should be more stable over longer periods of time)(Payne et al., 2007). Research has not specified the specific periods of time that could define such boundary conditions. This study will investigate whether performance goals can positively affect performance when a person has only 8-12 weeks in a new job.

2.2.3 Learning and performance: conflicting or complementary goals?

Though people tend to exhibit dominant goal preferences (Elliot, 2005; Fryer & Elliot, 2007; Van Iyperen, 2006), researchers recognize a person can adopt both learning and performance goals in the same achievement setting. This is especially relevant for people who lack experience in a new short-term job with important outcomes, since people in such settings are likely to be motivated to both learn and perform. Given the mixed findings on performance-approach goals, this raises two issues that need investigating. First, it is not clear if performance-approach goals combined with learning goals could boost people's performance without impairing their learning (e.g., by reducing intrinsic motivation) in a short-term job. It may be possible that the potential for performance-approach goals to erode people's intrinsic motivation is less relevant in a brief job lasting 8-12 weeks than it would be over a longer period of time (e.g., several years) (Elliot & Church, 1997; Fryer & Church, 2007). Research using a brief experimental task supports this (Barron & Harackiewicz, 2001). Second, the mixed findings regarding the relationship of performance-approach goals to proactive feedback seeking needs clarification. One explanation for this is performance-approach goals motivate people to seek feedback to validate their skills, while learning goals motivate people to seek feedback to improve skills (Janssen & Prins, 2007). In a short-term job in which a performance evaluation may be imminent, it also may be possible that performance-approach goals motivate people to proactively manage an evaluating supervisor's impressions of their performance (Porath & Bateman, 2006). Feedback seeking could be used as a tactic to manage supervisor impressions.

2.2.4 Goal orientations as organizational factors

Goal orientations are rarely investigated as organizational factors in work settings. Educational research shows classroom context (learning results vs. token rewards focus) influences students' goal adoption (learning vs. performance goals) (e.g., Self-Brown & Matthews, 2003). Research in work settings shows supportive organizational climates and sales supervisors who focus on end-results and subordinates' capabilities encourage less experienced subordinates to adopt learning goals (Kohli, Shervani, Challagalla, 1998). Supportive sales supervisors also reduce the perceived costs and increase the benefits of feedback seeking for learning-oriented sales people (VandeWalle, Challagalla, Ganesan & Brown, 2000). And protégés who share learning goals with mentors have higher career satisfaction and achievement aspirations (Godshalk & Sosik, 2003). Dragoni (2005) developed propositions on how group leader achievement patterns should positively affect both group and individual-level psychological climates and achievement patterns, and learning and performance outcomes. This dissertation investigates the effects of supervisor goal orientation on subordinate proactive behaviors, and learning and performance outcomes. In a short-term job, the potential impact of a supervisor's expectations on subordinate behaviors should become more salient over time as a performance evaluation becomes more imminent.

2.2.5 Employee training: A distinct yet relevant literature

There is a rich literature on employee training (for a review, see Salas & Cannon-Bowers, 2001). A number of studies in this literature use achievement goals as a theoretical framework to investigate training effectiveness in experimental settings (e.g., Ford et al., 1998; Kozlowski &

Bell, 2006; Kozlowski, Gully, Brown, Salas, Smith & Nason, 2001). Three insights from this literature are relevant here.

First, specific to achievement goal employee training studies, learning goals are effective at helping people transfer what they learn into actual job skills that help them perform. Performance goals, on the other hand, are ineffective at helping people transfer their learning into job skills. (e.g., Ford et al, 1998; Kozlowski & Bell, 2006; Kozlowski et al, 2001; Salas & Canon-Bowers, 2001: 479). Yet, the fact that performance goals are ineffective in training settings does not diminish their potential effectiveness in on-the-job settings (Deshon & Gillespie 2005; Payne et al., 2007).Training interventions and learning a new job are different situations. The purpose of training interventions is to develop skills and knowledge. This usually occurs in off-the-job settings where the pressure to perform in the job is at least temporarily reduced. Managers may view learning as a way to improve job performance, but ultimately subordinates are evaluated by their job performance (Seijts & Latham, 2005).

Second, learning skills that are associated with the performance of a job (e.g., technical expertise in a functional area) should be distinguished from learning knowledge associated with the organizational context of the job (e.g., criteria for how people are promoted in an organization)—only the former affects job performance (Colquitt,LePine & Noe, 2000). This distinction is relevant to people's goal content and preferences as noted earlier; learning goals focused on job-related skills should be distinct from learning goals focused on employer-related knowledge. This dissertation distinguishes both types of learning goals and the learning processes and outcomes that go with each.

Third, organizational contexts that support training transfer and practice are a key antecedent to training effectiveness (Arthur, Bennett, Edens & Bell, 2003; Salas & Cannon-

Bowers, 2001). This is consistent with the rarely tested proposition that supervisor goal orientations and organizational environments should affect subordinate learning and performance. In addition to individual and supervisor goal orientations, this study investigates the effects of newcomer socialization tactics as contextual factors that also influence learning and performance outcomes.

2.3 Newcomer Socialization

2.3.1 Defining newcomer socialization: Learning a new role

Socialization is the process by which "newcomers" learn the beliefs, attitudes and behaviors that are expected in their roles (Ashforth, 2001; Morrison, 1993a; VanMaanen & Schein, 1979). Roles are expectations for an organizational position that are "sent" by a role set (e.g., supervisors, peers) and subjectively interpreted by the newcomer (Kahn, Wolfe, Quinn, Katz, Snoek & Rosenthal, 1964). Effective socialization includes newcomers' behavioral proficiency in their jobs[3] (e.g., task mastery, performance), and acquisition of beliefs, attitudes and knowledge that indicate their understanding and acceptance of their roles as organizational members (e.g., role clarity, job satisfaction, organizational commitment, intention to remain) (Bauer et al, 2007).

The literature relies on two broad assumptions that are challenged in this dissertation. First, the process by which newcomers learn their roles is assumed to take 6-12 months or more (e.g., Callister et al, 1999). This assumption does not account for people in short jobs (Bauer et al, 1998; Saks & Ashforth, 1997a), people in fast growing organizations or rapidly changing industries (Rollag, 2004), and employers who want their employees to become productive in

[3] Compared to roles, jobs usually are defined by skill requirements, activities and responsibilities (Ilgen & Hollenbeck, 1992), while roles are defined as people's perceptions of their jobs and other attitudes or beliefs they are expected to possess as organizational members.

their jobs more rapidly than in the past (Rollag et al, 2005). Second, though socialization is assumed to be a learning process (e.g., Bauer et al., 2007; Chao, O'Leary-Kelly, Wolf, Klein & Gardner, 1994; Klein, Fan & Preacher, 2006; Ostroff & Kozlowski, 1992; Saks & Ashforth, 1997b; Payne et al., 2007), learning outcomes are rarely investigated in the literature (Bauer et al, 2007: 718). This may be because newcomers are simply *presumed* to have learned their roles over a relatively lengthy 6-12 month socialization period, as evidenced by outcomes such as task mastery and role clarity. Task mastery is a conflation of learning and performance (e.g., "I am confident about the adequacy of my job skills and abilities"; Morrison, 1993b). This dissertation addresses the need to distinguish between learning and performance outcomes when learning a new short-term job.

The newcomer socialization literature has two main streams. The larger stream investigates how organizational factors called socialization tactics influence newcomer outcomes (Bauer et al 2007; Jones, 1986; Van Maanen & Schein, 1979). A smaller stream investigates how newcomers' proactive behaviors affect their outcomes (e.g., Gruman, Saks & Zweig, 2006; Kim, Cable & Kim, 2005; Morrison, 1993a,b), with information and feedback seeking as the most frequently investigated behaviors (Bauer et al, 2007; for a review of information seeking, see Morrison, 2002a; for a review of feedback seeking, see Ashford, Blatt & VandeWalle, 2003). Socialization tactics are reviewed first.

2.3.2 Organizational factors: Socialization tactics

Socialization tactics are people-processing routines characterized along an institutionalized-individualized continuum (Van Maanen & Schein, 1979). Thus, socialization tactics can be viewed as a form of new employee training, though training and socialization are

distinct literatures. *Institutionalized tactics* are relatively stable routines that convey the *context, content,* and *social aspects* of a newcomer's entry experience, while *individualized* tactics require newcomers to figure out their roles on their own (Bauer et al, 2007; Jones, 1986). For example, organizations may give newcomers formal and sequential introductions to their work *context* (versus informal training in no particular order), train them in the *content* of their work alongside other newcomers (versus unguided on-the-job training), and provide frequent *social* contact with supportive mentors and role models during entry (versus leaving them on their own to figure out their roles). Consistent with the literature, "socialization tactics" is used synonymously with "institutionalized tactics".

Bauer et al (2007: 709) summarizes the mechanisms that make socialization tactics work: context tactics provide a planned set of entry experiences that improve role clarity; content tactics strengthen newcomer's self-efficacy by providing "off the job" training that is "nonthreatening" and minimizes the performance consequences of their new roles; social tactics provide newcomers with supportive role models and developmental feedback. These mechanisms appear to work. Institutionalized tactics (as perceived and experienced by newcomers) are positively related to individual task mastery and job performance (e.g., Ashforth & Saks, 1996; Bauer et al, 2007; Gruman et al, 2006; Jones, 1986; Ashforth, Sluss & Saks, 2007).

There are two reasons, however, why the relationships between institutionalized tactics and socialization may be overstated. First, studies using retrospective cross-sectional designs show stronger results than longitudinal studies (Bauer et al, 2007). Second, in additional to organizational factors, supervisors and newcomers own proactive behaviors may affect newcomer learning and performance outcomes (Bauer & Green, 1998). This dissertation will use

a longitudinal design to investigate whether institutionalized tactics explain variance in job performance and learning beyond the efforts of supervisors and proactive newcomers.

2.3.3 Individual factors: Newcomer characteristics and proactive behaviors

Another stream of socialization research begins to address the second issue by investigating newcomers' proactive behaviors as individual factors that affect their socialization (e.g., Ashforth et al., 2007; Ashford & Black, 1996; Gruman et al, 2006; Morrison, 1993a,b). People use proactive behaviors to define, fulfill, or redefine their own roles (see Crant, 2000 for a review of proactive behaviors). Proactivity also can be viewed as an individual trait (Bateman & Crant, 1993). Studies investigating individual characteristics as antecedents to newcomer proactive behaviors and socialization are reviewed first, followed by studies investigating the relationships of proactive behaviors to socialization.

Three individual characteristics studied as proactive socialization antecedents include desire for control, big five personality traits, and proactive personality. Newcomers with a desire for control orientation were more likely to engage in social behaviors, information seeking, and job change negotiations, though these behaviors did not contribute to their job performance 6 months later (Ashford & Black, 1996). Extraversion (as a big five personality trait) was positively related to relationship building, feedback seeking, and to framing personal challenges as opportunities rather than threats (Wanberg & Kammeyer-Mueller, 2000). The latter two behaviors are characteristic of people with learning goals, which may partly explain a positive correlation between extraversion and learning goal orientation (Payne et al, 2007). In another study, proactive personality measured 2-3 months post-entry was positively related to task mastery and to learning about an organization's political structure 6 months later (Kammeyer-

Mueller & Wanberg, 2003). No studies have investigated individual goal orientations as antecedents to proactive newcomer socialization. Wang & Takeuchi (2007) came closest by investigating the effects of expatriate goal orientations on their adjustment to their new jobs and new cultural environments. They found expatriates with learning goals performed better in their jobs than those with performance goals, partly mediated by their adjustment to their new work setting 6 months earlier. Study participants had been in their jobs an average of 2.1 years, however, and therefore were not newcomers. This dissertation is the first study to investigate goal orientations as antecedents to proactive newcomer learning and performance.

Independent of individual traits, proactive behaviors also have been investigated as socialization antecedents. Two studies of newly hired public accountants focused on the relationships of proactive behaviors to socialization outcomes (Morrison, 1993a,b). Newcomers who proactively sought information about job evaluation standards, and proactively sought performance feedback (three months after entry) reported greater task mastery (three months later). Callister et al. (1999) found job transferees' information seeking declined over six months following a job transfer, while feedback seeking was stable. Interestingly, people with clear roles at entry were less likely to seek supervisor feedback after three months, but not after six months. It may be that as a performance evaluation drew nearer (e.g., a six month review), a need for feedback became more salient. Chan & Schmitt (2000) focused exclusively on proactive behavior change among new doctoral students during their first four months in their programs. Over time, students sought technical information more frequently from faculty and less frequently from peers. They also sought information on how they would be evaluated more frequently over time, and reduced their relationship building efforts. Support for learning was found as task mastery and role clarity increased over time. In a short-term job, one would expect

people to be most concerned with how their performance will be evaluated as such an evaluation becomes imminent.

2.3.4 Integrating organizational and individual factors

Studies also have examined the relationship of organizational factors to newcomer proactive behaviors. Being proactive in a new organizational context can have social costs. For example, seeking feedback could expose a newcomer's lack of skill, making one appear less competent to colleagues or supervisors (e.g., Morrison, 1993a,b; 2002b). To the extent that organizational factors (e.g., supervisor behaviors, socialization tactics) lower these social costs, newcomers should be more likely to engage in proactive behaviors (e.g., VandeWalle et al., 2000; Reichers, 1987). Consistent with this argument, Bauer & Green (1998) proposed the absence of measures of supervisor behaviors in prior studies (e.g., Morrison, 1993a, 1993b) may have inflated the effects of newcomer proactive behaviors. They argued newcomer proactivity, along with supervisors who encourage newcomers to be proactive should have additive effects on newcomer socialization. They found newcomer information seeking did not predict newcomer role clarity and performance efficacy after controlling for supervisor clarifying behaviors.

A similar argument can be made for socialization tactics. If such tactics strengthen newcomers' self-efficacy, reduce their performance threats, and provide social support (Bauer et al, 2007), they also should reduce the social costs of newcomer proactivity. In support of this explanation, socialization tactics were positively associated with newcomer information seeking (Miguerney, Rubin & Gorden, 1995; Saks & Ashforth, 1997b). A recent cross sectional study of undergraduate interns also found proactive behaviors partly mediated the relationship of

socialization tactics to socialization outcomes (including role clarity, though not task mastery) (Gruman et al., 2006). Viewing socialization as a learning process, another recent study found general learning[4] (that included both job-related skills and organizational knowledge) mediated the relationship of both socialization tactics and newcomer proactive behaviors, on newcomer performance (Ashforth, Sluss & Saks, 2007). Finally, a recent meta-analysis (Bauer et al., 2007) used a structural model to show both socialization tactics and newcomer proactive behaviors (information seeking, and to a greater extent, feedback seeking) were related to job performance (and other socialization outcomes). Socialization tactics and proactive behaviors also were correlated across studies in the same meta-analysis (ρ=.22, $p < .05$), though the effects of socialization tactics on proactive behaviors were not tested. Since only a few studies have investigated the relationship of socialization tactics to newcomer behaviors, more are needed "to understand how and why socialization tactics affect newcomer adjustment" (Saks et al, 2007: 441). This dissertation will investigate linkages between socialization tactics and proactive behaviors.

2.3.5 Internships: A sparse yet relevant literature

A sparse literature on internships (mainly undergraduates and medical interns) outside the mainstreams of newcomer socialization is worth acknowledging. This literature provides useful insights to practitioners (e.g., career counselors) and clinicians (e.g., teaching physicians), tends to rely on retrospective self-reports, and generally does not account for learning and performance using theory-based mechanisms (Cook, Parker & Pettijohn, 2004; Dornan, Boshuizen, King &

[4] Learning in this study was operationalized as the extent to which newcomers had learned seven content areas: 1) how to perform one's job: 2) performance standards; 3) appropriate social behaviors; 4) feedback on performance; 5) organizational history and norms; 6) organizational procedures and structure; 7) organizational political structure (Morrison, 1995).

Scherpbier, 2007; Eyler, 1996; Narayanan, Olk & Fukami, 2006). These studies do show interns can experience positive learning and career development outcomes, especially when their jobs require them to apply course content (Narayanan et. al., 2006). A smaller group of studies that gives more attention to theory based mechanisms finds a combination of structured entry experiences and job autonomy results in positive job outcomes (e.g., Feldman, Folks & Turnley, 1998; Feldman & Weitz, 1990; Taylor, 1988). This suggests people in short-term jobs may be most energized when the organizational context offers both clear job responsibilities and opportunities to be proactive in their jobs.

4. Conclusions

This review identified insights and gaps in the achievement goal and newcomer socialization literatures that set the stage for developing theory on learning and performing in short-term jobs. The achievement goal literature treats learning and performance orientations as distinct preferences that affect people's cognitions, behaviors and learning and performance outcomes. Learning and performance goals also have effects that could either complement or conflict with one another. Learning goals help people learn. Learning goals also *may* help people perform. However, studies in work settings have investigated people who are experienced in their jobs, not people who are new in their jobs. It may be possible that learning goals affect performance when people already have the skills needed in their jobs. Performance goals help people perform, but do not help them learn. Over time, performance goals also may undermine the motivations and behaviors that contribute to learning, though it is not clear over what period of time that could occur. This dissertation addresses how learning or performance goals (or both)

affect how people learn and perform in a new job where they have a short amount of time to achieve both outcomes.

The newcomer socialization literature bypasses the learning-performance tension by assuming newcomers have 6-12 months or more to learn how to perform their jobs. This assumption does not apply to short-term jobs, or to organizations that emphasize the importance of rapid on-boarding for new employees. Though socialization is implicitly a learning process, learning has been rarely investigated as an outcome in socialization studies. When accounting for newcomer learning, a distinction should be made between learning skills that affect performance, and learning organizational knowledge that does not affect performance. Training literature that focuses on off-the-job learning highlights this distinction. The socialization literature that focuses on on-the-job learning has not investigated the distinct antecedents to each type of learning. The distinction also is relevant in testing an assumption of the achievement goal literature that it is possible for people to have independent learning orientations focused on different learning targets (e.g., job skills, and organizational knowledge).

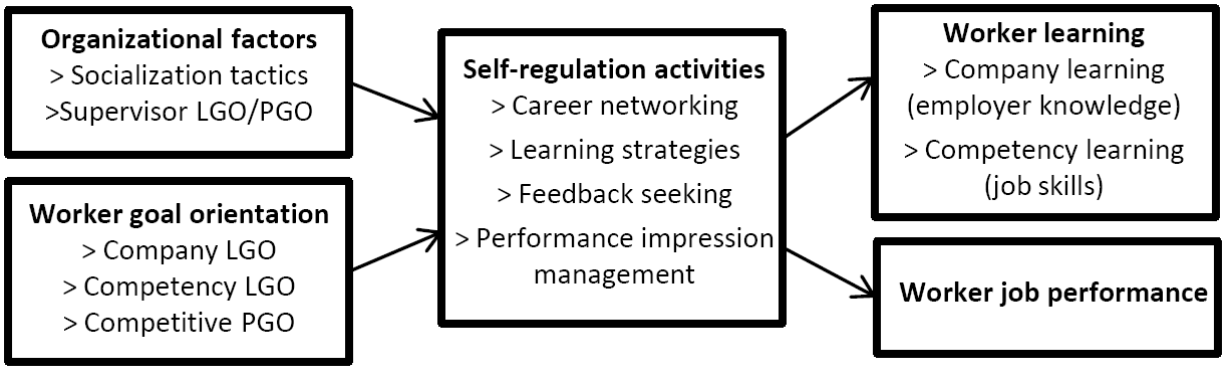
Both literatures have demonstrated the importance of proactive behaviors when entering a new job, especially feedback and information seeking. Mixed findings in the achievement goal literature requires further investigation of why performance goals appear to motivate proactive feedback seeking in some conditions but not others. The socialization literature has focused more on the effects of organizational actions (tactics) on people's task mastery and job performance, than the achievement goal literature. Both literatures will benefit from this dissertation's study of the combined effects of organizational, supervisory, and individual factors on people's learning and performance in a new short-term job.

Chapter 3: A Theoretical Model for Learning and Performance in a Short-Term Job

3.1 Overview

This chapter presents a theoretical model specifying the underlying motivations, experiences and activities behind learning and performance in short-term work. In particular it explains the mechanisms by which goal orientations and organizational factors affect workers' on-the-job learning and performance. The model displayed in figure 3-1 has four kinds of constructs, including 1) worker goal orientations; 2) organizational factors; 3) worker self-regulation activities; 4) and learning and performance outcomes.

Figure 3-1: Theoretical Model



According to the model, goal orientations selectively motivate self-regulation activities which in turn affect a worker's learning and performance outcomes. For example, a competency learning goal orientation (LGO) only motivates workers use learning strategies, and to seek feedback on how to improve their skills. These activities positively affect their skill development and performance. Organizational factors, including socialization practices and supervisor goal orientations, also lead to self-regulation activities that influence learning and performance.

3.2 Theory and Hypotheses

3.2.1 Effects of goal orientations on learning and performance

Goal orientations are "cognitive frames" that influence how people "approach, interpret, and respond to achievement activities" that develop or display their competence in a particular domain (e.g., a work setting)(Kozlowski & Bell, 2006: 902). Goal orientations motivate people to focus their attention, effort and behavior on the achievement of learning or performance outcomes. They are more general than the specific, challenging goals in goal setting theory (Locke & Latham, 2001). They also are more specific than traits, intentions or motives (Fryer & Elliot, 2007).

Workers can have two kinds of learning goals, and one kind of performance goal. *Competency learning goal orientation (LGO)* is a worker's preference to learn skills, master new situations, and develop competencies in a short-term job (Elliot & McGregor, 2001; Payne et al., 2007). *Company LGO* is a worker's preference to learn about critical features of the employing organization in order to evaluate a potential longer-term employment relationship. Company and competency LGO are distinct learning-approach goals targeted at different learning outcomes. A competency LGO motivates workers to acquire skills while performing their job. For example, a person may want to learn the skills required to be a successful technology consultant. These skills could apply to other employment settings. A company LGO motivates a person to learn more about regular employment with the organization. For example, a person may want to learn about employment opportunities with a specific technology consulting firm. Each learning orientation is conceptually independent. They need not co-occur, though empirically they can.

Workers also may be motivated to demonstrate their performance capabilities. *Competitive performance goal orientation (PGO)* is a worker's preference to display competence

in a job and gain favorable judgments about it by performing better than peers (Elliot & McGregor, 2001; Payne et al., 2007). Peers include others working in equivalent jobs for the same employer, or others the employer would consider as candidates for employment. For example, workers may want to outperform others in similar jobs with the same employer to improve their own prospects of being offered a regular fulltime job.

Each goal orientation keeps worker attention, effort and behavior focused on goal attainment (Bell & Kozlowski, 2006; Elliot & Church, 1997; Fryer & Elliot, 2007; Lee et al., 2003; Payne et. al., 2007). Competency LGO will direct workers to develop job skills, or what is defined here as *competency learning*. Competency learning is a worker's skill improvement as a consequence of experience in a job (Anderson, 2000) (e.g., technical skills in a functional specialty, interpersonal skills). Competency LGO motivates them to identify skills they want to improve, to set their own skill improvement goals, to use effective learning strategies, and to be more interested in their work (Elliot & Church 1997; Elliot & McGregor, 2001; Fryer & Elliot, 2007; Harackiewicz, Baron & Elliot, 1998; Lee et al., 2003; Linnenbrink, 2005; Rawsthorne & Elliot, 1999; VandeWalle & Cumings, 1997). These activities will result in competency learning. To perform well in a new job, people generally need to develop new skills and knowledge (Ford et al., 1998; VandeWalle, 2003). This suggests competency LGO also should positively affect performance. Moreover, people with learning goals also are more effective at transferring what they learn into tangible job skills that improve their performance (Kozlowski & Bell, 2006; Kozlowski et al., 2001; Seijts et al., 2004). These arguments are consistent with prior research which shows a positive relationship between learning goals and performance (Payne et al., 2007).

Company LGO will focus worker attention and effort on reducing discrepancies between their knowledge of the organization before starting their jobs, and the knowledge they aspire to have when their jobs are over. Those who adopt a company LGO will be more interested in their employers, more likely to set goals about what they plan to learn about their employers, and more proactive in seeking information from knowledgeable insiders (Church & Elliot, 1997; Elliot & McGregor, 2001; Fryer & Elliot, 2007; Harackiewicz et al., 1998; Lee et al., 2003; Linnenbrink, 2005; Rawsthorne & Elliot, 1999). These activities will result in *company learning*, defined here as an increase in a person's knowledge about regular fulltime employment with the organization (e.g., promotion and reward systems).

Workers with a competitive PGO will persist and exert effort to meet performance standards, pursue activities that make them look competent in their jobs, and avoid situations that make them look less competent than peers (Church & Elliot, 1997; Elliot & McGregor, 2001; Fryer & Elliot, 2007; Harackiewicz et al., 1998; Karabenick, 2003; Lee et al., 2003; Linnenbrink, 2005; Rawsthorne & Elliot, 1999; VandeWalle & Cumings, 1997). They will work hardest where they can display the most competence or enjoy a relative performance advantage (Elliot, Shell, Henry & Maier, 2005; Grant & Dweck, 2003; Midgley, Kaplan & Middleton, 2001). These efforts and behaviors will be positively related to their performance.

To summarize, workers who are starting a new job can adopt a company LGO, a competency LGO and a competitive PGO. Each goal orientation focuses their attention, effort and activity. Company LGO motivates them to learn about their employer organization. Competency LGO motivates them to develop skills and to perform well. Competitive PGO motivates them to outperform their peers.

Hypothesis 1a: Company LGO will be positively related to company learning.

Hypothesis 1b: Competency LGO will be positively related to competency learning and performance.

Hypothesis 1c: Competitive PGO will be positively related to performance.

3.2.2 Organizational factors: Effects of supervisor goal orientation on learning and performance

So far I have argued workers with different goal orientations will pursue different kinds of outcomes in their jobs. Several distinctive features of short-term workers are important to highlight since they are relevant to both the goals workers adopt, and how they are influenced by organizational factors including supervisor behaviors. First, they have to perform well in a short-amount of time. Performing well is critical to their prospects for a regular fulltime job either with the same organization or with a different employer. Second, they have to develop skills quickly in order to fulfill their work duties (Ford et al., 1998), and to enhance their prospects for career advancement (Ng et al., 2005). The pressing need to both learn and perform distinguishes short-term workers from regular fulltime workers who may focus their first few weeks or months on learning the ropes of a new job, followed by a focus on performing well. For example, socialization researchers view learning as a proximal outcome (e.g., 3-6 months after entry) of successful newcomer adaptation, and performance as a distal outcome (e.g., 6-24 months after entry) (Ashforth et al., 2007; Payne et al., 2007). For short-term workers, distinctions between proximal learning and distal performance are blurred as they need to attain both outcomes in a short amount of time.

The fact that short-term workers need to both learn and perform suggests their goal orientations should have powerful effects on the kinds of activities they pursue, and the

outcomes they achieve. This has two alternative implications. One alternative is organizational factors play a minor role in influencing their learning and performance. In other words, if workers are highly motivated to both learn and perform, their own goal orientations may override the influence of organizational factors. Another alternative which I argue here is that organizational factors play a significant role by signaling what workers are expected to learn, and how their performance will be evaluated. Organizational factors also may provide resources that can help them achieve both outcomes. I address the influence of two organizational factors in order: the supervisor's goal orientation, followed by the organization's socialization practices.

Supervisors are an important source of information for how workers should learn and perform in their jobs for several reasons. First, they communicate how subordinates are expected to carry out their work roles. According to role theory, people construe their work roles based on their perceptions of others' expectations (Ilgen & Hollenbeck, 1992; Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964). Supervisors are a key source of these expectations. Second, supervisors have power over subordinates in the organizational hierarchy which they use to influence subordinate behavior (Yukl & Falbe, 1991). Third, supervisors evaluate subordinate performance. Their role in evaluating subordinate performance has more substantial consequences for short-term subordinates than for regular fulltime employees. For example, regular fulltime workers typically are evaluated every 6-12 months. Only rarely is their job at stake with each performance evaluation. By comparison, short-term workers anticipate one final performance evaluation after 2-3 months. This single performance evaluation will determine if they are offered a regular fulltime job, or a positive recommendation for a job elsewhere. The importance of this performance evaluation suggests subordinates are likely to allocate their

attention and effort to interpreting and understanding supervisor expectations as they perform their jobs.

Supervisor goal orientations are one source by which supervisors communicate the role expectations they want subordinates to fulfill. *Supervisor LGO* is a supervisor's preference for subordinates to acquire skills and knowledge while performing their job. Supervisors may adopt a LGO because of their own learning-oriented preference, because they view developing newly hired subordinates as part of their job (Jones, 1986), or because they want to assess the learning capabilities of permanent job candidates (Baron & Kreps, 1999). *Supervisor PGO* is a supervisor's preference for subordinates to display their competence by outperforming their peers. Supervisors may adopt a PGO because of their own preferences, because they believe that higher performing subordinates are better qualified for regular fulltime jobs, or because subordinate performance is a key input into their own performance.

As workers enter an organization, they are likely to initiate rapid and ongoing monitoring of their work environment to understand what supervisors expect of them (Chan & Schmidt, 2000; Morrison, 1993a,b; 2002a,b). As supervisor learning or performance-oriented expectations are interpreted by subordinates, they will engage in activities that are consistent with these expectations (Dragoni, 2005). For example, supervisors with a PGO will expect subordinates to demonstrate how competent they are in performing their jobs. Workers who are attentive to fulfilling this expectations will allocate effort and attention to performing well. Supervisors with a LGO will expect subordinates to take advantage of training opportunities and to develop new skills in their jobs. This will motivate them to engage in these activities, which will positively affect their learning and consequently, their performance.

The process by which supervisor goal orientations affect subordinates' learning and performance outcomes is similar to the process used in experimental settings. In these settings, experimenters cue learning or performance goals by emphasizing the importance of learning or performance-oriented behaviors (e.g., Ames, 1992; Kozlowski & Bell, 2006; Kozlowski et al., 2001). For example, a learning orientation is cued by emphasizing the importance of learning from mistakes. Furthermore, supervisors with a LGO will be more likely to provide their subordinates with mentoring (Godshalk & Sosik, 2003) and access to organizational resources that support their learning. This will provide them greater access to supervisor expertise, experience, and organizational knowledge, which should help them both learn more and perform better in their work assignments. In a short-term job, supervisor goal orientations will become clearer to subordinates as they accumulate more information about the supervisor's expectations over time. Supervisor goal orientations also should become more salient to subordinates as their performance evaluation becomes more imminent.

Thus, supervisor LGO and PGO will have similar effects on subordinates' learning and performance as competency LGO and competitive PGO. Supervisor PGO will direct their attention, effort, and behavior towards performance achievement. Supervisor LGO will direct their attention, effort and behavior towards learning and performance achievement.

Hypothesis 2a: Supervisor LGO will be positively related to workers' competency learning and performance.

Hypothesis 2b: supervisor PGO will be positively related to short-term workers' performance.

3.2.3 Interactive effects of incongruent subordinate and supervisor goal orientations

I have argued both the subordinate's own goal orientations and the supervisor's goal orientations will affect subordinate learning and performance. What happens if the combination of subordinate and supervisor goal orientations are incongruent? I consider two incongruent scenarios: 1) competitive PGO combined with a supervisor LGO and 2) competency LGO combined with a supervisor PGO.

In the first scenario, learning-oriented supervisors expect their performance-oriented subordinates to develop skills. This has two implications. First, it motivates performance-oriented subordinates to allocate more attention and effort to learning. This is because performance-oriented subordinates know their supervisor will evaluate their performance. If the supervisor expects them to develop skills, they will pay close attention since fulfilling these expectations is instrumental to a favorable evaluation. Second, the supervisor learning frame provides performance-oriented subordinates with a "means-end path" by which higher performance can be achieved through skill development (Kozlowski & Bell, 2006). In other words supervisor LGO legitimizes learning activities for subordinates, while their own competency PGO channels their learning activities towards performance achievement. For example, subordinates will allocate more attention and effort to achieving learning standards (compared to those with weak performance goals), which causes them to both learn and perform more effectively (Seijts et al., 2004). Without the supervisor's learning goal frame, these subordinates would have foregone learning activities and focused more exclusively on achieving performance standards (Kozlowski et al., 2001; Martocchio, 1994; Meece, 1994). Consequently, subordinates with a competency PGO should learn more and perform better when their

supervisors have strong learning orientations, and learn less and perform worse when their supervisors have weak learning orientations.

In the second scenario, performance-oriented supervisors expect their learning-oriented subordinates to display their ability to perform. This scenario will impair both learning and performance outcomes for short-term subordinates. The reason is the supervisor's performance orientation will induce subordinates to engage in activities that are not conducive to learning, and that conflict with their own learning motivation. Subordinates with strong learning goals are motivated to be intrinsically engaged in their work, to seek out challenging activities, and to focus on improving their skills (Fryer & Elliot, 2007; Harackiewicz, Baron & Elliot, 1998; Lee et al., 2003; Linnenbrink, 2005; Rawsthorne & Elliot, 1999; VandeWalle & Cumings, 1997). In a novel, complex task environment, these activities help them perform well (Ford et al., 1998; Kozlowski et al., 2001; Seijts et al., 2004). In contrast, supervisors expect them to prove their competence in a competitive work environment, and to show they can outperform their peers. These performance-oriented expectations will divert subordinates' attention and effort away from their preferred learning activities. The performance frame imposed on them by their supervisors, combined with their own preferred learning frame, cues conflicting activities that will create "cognitive interference" for subordinates (Kozlowski & Bell, 2006). This cognitive interference will impair both learning and performance. For example, the supervisor performance frame will cause them to forego learning-oriented activities—even though they otherwise view skill improvement as a desired aim. Since performance-oriented activities are not conducive to learning (Kozlowski et al., 2001; Martocchio, 1994; Meece, 1994), and since the supervisor expects them to engage in performance-oriented activities, the net effect is both learning and performance will be impeded. Consequently, workers with a competency LGO should learn less

and perform worse when their supervisors are more performance-oriented, and learn more and perform better when their supervisors are less performance-oriented.

To summarize, I have argued that incongruent subordinate and supervisor goal orientations can either improve or impair subordinates' learning and performance outcomes. A competitive PGO combined with a supervisor LGO provides subordinates with a legitimate means-end path by which performance can be achieved by pursuing learning activities. A competency LGO combined with a supervisor PGO distracts subordinates from their motivational preference to achieve performance by pursuing learning activities. This suggests the following moderation hypotheses.

Hypothesis 3a: Supervisor LGO will moderate the relationship of competitive PGO to competency learning and performance so that workers will learn more and perform better if supervisor LGO is stronger, and learn less and perform worse if supervisor LGO is weaker.

*Hypothesis 3b:*Supervisor PGO will moderate the relationship of competency LGO to both competency learning and performance such that workers will learn less and perform worse if supervisor PGO is stronger, and learn more and perform better if supervisor PGO is weaker.

3.2.4 Organizational factors: Effects of socialization tactics on learning and performance

In addition to supervisor goal orientations, another organizational factor that should influence workers' learning and performance is the employer's practices concerning new worker training. Socialization tactics are a dominant framework for explaining how organizational practices influence newcomer learning and adjustment, so their effects on short-term worker learning and performance should be considered.

Socialization tactics require organizational resources. Structured, formal training must be planned and implemented. Managers need to spend time and effort to mentor subordinates. Consequently, an important question is, "Why would employers use such resource-intensive practices to train short-term workers when employers know many of them will not be hired into regular fulltime jobs?" A likely reason is that by using socialization tactics as part of an "apprenticeship", employers can identify the highest potential candidates for regular fulltime jobs (Baron & Kreps, 1999). Formal, sequential training (content and context tactics) ensures each short-term worker is exposed to the same off-the-job developmental experiences. Mentoring and social support (social aspects tactics) helps ensure that managers can closely monitor and evaluate each short-term worker's on-the-job learning and performance. This enables both employers and workers to assess their mutual fit (Schneider, 1987). Once the short-term job is over, employers can "skim the cream" and offer permanent jobs only to the highest quality, best trained candidates (Baron & Kreps, 1999: 388-389).

It follows that socialization tactics will positively affect short-term workers' competency and company learning. They will experience competency learning because the training will develop their skills, and strengthen their motivation to learn proactively. They will develop skills through a set of planned entry experiences, by strengthening their self-efficacy through off-the job training, and by experiencing socially supportive guidance and feedback (Bauer et al., 2007). They will be more motivated to develop their skills because the organization's use of these tactics signals the employer values learning and development activities. Employers who use such resource-intensive training practices for short-term workers send a strong message: "We value skill development. You should too." This will motivate them to proactively develop skills. For

example, they should be more likely to seek feedback to identify competencies they should improve, and to focus their effort and attention on developing these competencies.

Workers also will be more likely to experience company learning because the tactics will provide them more opportunities to learn about the organization, and will strengthen their motivation to proactively seek information about the organization. They will have more opportunities to develop their organizational knowledge through structured training experiences and socially supportive mentoring (Chao et al., 1994; Klein et al., 2006). Socialization tactics also will strengthen workers' motivation to learn about the organization. The use of such tactics signals the possibility of a regular fulltime job offer. For example, short-term workers can capitalize on opportunities to initiate relationships with organizational members to learn more about regular employment in the organization.

Socialization tactics help new workers develop their skills and knowledge, which then can help them perform their jobs more effectively (Quinones et al., 1995). This is consistent with the view in the literature that learning is a proximal outcome of socialization tactics, and performance is a distal outcome (Ashforth et al., 2007; Bauer et al., 2007; Klein et al., 2006; Ostroff & Kozlowski, 1992; Saks & Ashforth, 1997a). For short-term workers, the relationship between socialization tactics and performance may be more tenuous since learning and performance are both proximal outcomes. The supervisor's performance expectations (i.e., supervisor PGO), or workers' own motivation to perform well (i.e., competitive PGO) may play a more powerful role in driving performance than the organization's training practices. As indirect support of this possibility, in a study of undergraduate interns in short-term jobs, Gruman, Saks and Zweig (2006) found self-efficacy (an indicator of motivation and ability) was positively related to task mastery (an indicator of performance), though socialization tactics were

not. This suggests an alternative hypothesis for short-term workers in which socialization tactics are positively related to learning, but not to performance.

To recap, the use of socialization tactics signals to workers that the employer expects them to develop skills and organizational knowledge. This should positively affect their learning. Though skill development translates to performance gains for people in longer term jobs, an alternative hypothesis for short-term workers is performing well depends more on their own performance motivation and supervisor expectations than on organizational training practices.

Hypothesis 4: Employer use of socialization tactics will be positively related to workers' learning and performance.

Alternative Hypothesis 4: Employer use of socialization tactics will be positively related to workers' learning, but not to their performance.

3.2.5 Effects of goal orientations to self-regulation activities

Goal orientations motivate people to engage in self-regulation activities that reduce the tension between their current and desired state. Lewin (1936) pointed out that discrepancies between a desired and current state creates tension until the desired state is achieved. Goal orientations draw attention to these discrepancies between the desired and current states. Reducing these discrepancies is a driving mechanism that directs a person's self-regulation activities. As chapter 2 stated, self regulation involves *monitoring* one's own thoughts and behaviors, *evaluating* discrepancies between one's current state and a desired standard, and *reacting* to these discrepancies by reallocating or withdrawing one's attention and effort (Kanfer & Ackerman, 1989). Self-regulation activities enable people to evaluate these discrepancies

when they assess the tension between the desired and current states noted by Lewin. For example, a competency LGO motivates activities that help people evaluate what they aspire to learn and how their learning is progressing. People react to discrepancies between their aspirations and their progress by engaging in activities that reduce the tension between the desired and current states. For example, if learning is progressing well for some desired skills but not others, a competency LGO will motivate people to react by focusing their activities more on the underdeveloped skills, and less on the well-developed skills.

Workers adopt a company LGO because of discrepancies between their current and desired knowledge of their employer. *Career networking* is a relationship building behavior (Ashford & Black, 1996) they use to reduce this discrepancy. Career networking is a worker's proactive initiative to learn about the employer organization and about the career experiences of organizational members. Workers who engage in career networking will develop a more detailed understanding of what regular fulltime jobs are like inside the organization. They also signal their interest in permanent employment with the organization.

Workers with a competency LGO experience a discrepancy between their current skills, and the skills they desire to have when their jobs end. Supervisor LGO also highlights a discrepancy between current and future skills for subordinates by emphasizing the importance of developmental activities. Workers can reduce these discrepancies by using learning strategies and feedback seeking. Learning strategies have been investigated in educational and experimental settings. They are operationalized in a variety of ways including intrinsic interest, learning effort, help seeking behaviors, rehearsal of learning content, integration of learning content, and meta-cognitive strategies (i.e., how people think about and organize their learning processes) (e.g., Pintrich, Smith, Garcia & McKeachie, 1993; Ford et al., 1998). This broad set of

dimensions shows there are numerous ways to conceptualize learning strategies (Payne et al., 2007). *Learning strategies* here are defined more narrowly as a short-term worker's planned efforts to learn new skills, and to adapt prior skills and experience to new situations encountered in a job. The definition includes two dimensions: learning effort and integration of prior experience. When people react to discrepancies between their goals and actual progress, they make choices about how to allocate their effort (Bell & Kozlowski, 2006; Kanfer & Ackerman, 1989). LGO sustains a person's learning effort because the goal of improving one's own skills is a dynamic standard (Fryer & Elliot, 2007). Prior experience helps them learn and adapt to new work roles (Ashforth, 2001). Short-term workers who integrate their prior experiences into their job context will be able to evaluate which skills they should focus on developing. They will then be able to more effectively allocate their learning effort, and leverage their past experience. For example, a former engineer may integrate previously acquired quantitative skills to a new job setting as a financial analyst, or a former sales professional may use previously acquired interpersonal skills in a new job as a medical intern. In each case, differences between their previous and current experiences can help them both make use of past experience, and identify specific skills they want to improve in their new jobs.

Feedback seeking is the extent to which a worker seeks input from a supervisor (or others with expertise in the organization) to identify opportunities to improve skills or performance. Competency LGO will motivate feedback seeking because this activity will helps workers evaluate discrepancies between their current and desired skills. Supervisor LGO also will motivate this activity since the supervisor expects the subordinate to engage in activities that help them develop their skills. Based on the skill discrepancies that feedback seeking provides workers, they can react by either avoiding further critiques of their skills, or by developing plans

and exerting effort to improve those skills (Ashford et al., 2003). Feedback seeking has social costs for people who are starting new jobs (Morrison, 1993b). Seeking feedback can give others the impression that one lacks competence needed to perform one's job. Short-term workers with a competency LGO or with learning-oriented supervisors will engage in feedback seeking because they view the learning benefits as outweighing the social costs of exposing their lack of competence (VandeWalle & Cummings, 1997; VandeWalle, 2003). That is, as they evaluate the social costs of appearing incompetent, they conclude these costs are substantially less than the benefits of learning. They then react by seeking feedback to evaluate areas for further skill improvement. This is consistent with positive associations between learning goals and feedback seeking (Payne et al., 2007).

Prior research shows people with a PGO view the costs of exposing their skill deficiencies as outweighing the performance benefits (Ashford et al., 2003; VandeWalle & Cummings, 1997; VandeWalle et al., 2000). That is, as they evaluate the social costs of seeking feedback, they conclude the costs exceed the benefits. They react by refraining from feedback seeking. For this reason, meta-analytic findings across 15 studies show a null relationship between PGO and feedback seeking ($N=1847$, $\rho= -.01$; Payne et al., 2007).

For short-term workers, however, a null relationship between PGO and feedback seeking should be less likely because workers are under pressure to perform well in their jobs. With little time to achieve their performance goals, they may view the performance benefits of seeking feedback as exceeding the social costs of exposing their skill deficits. Seeking feedback can provide them useful information about discrepancies between their current and desired performance in a short amount of time. They can then react to these discrepancies by taking corrective actions to improve their performance before supervisors make a final evaluation. This

argument is consistent with the fact that performance orientations are rooted in both dispositional fear of failure and need for achievement (Elliot & Church, 1997). For example, performance-oriented workers increase their risk of failure if they do not seek information that could help them achieve performance outcomes. People with both a high need for achievement and fear of failure in this situation should be more likely to seek feedback. As indirect support, some studies show positive relationships between performance goals and feedback seeking (Park et al., 2007; Porath & Bateman, 2006; Tuckey, Brewer & Williamson, 2002). This implies an alternative hypothesis for short-term workers in which PGO is positively related to feedback seeking.

Workers with a competitive PGO or a performance-oriented supervisor also should be motivated to make the supervisor aware of their achievements (Porath & Bateman, 2006; Janseen & Prins, 2007; VandeWalle, 2003). For example, Porath & Bateman (2006) found an unexpected positive relationship between performance goals and feedback seeking in a sample of sales people. They suggested performance-oriented sales people sought feedback to remind their supervisors they had met their sales goals. In other words, they were not really seeking feedback to improve their performance, but they were using feedback seeking to indirectly inform their supervisors of how well they were performing their jobs. This would have been possible because the tangible nature of sales performance (i.e., meeting sales quotas) could have eliminated the risk of appearing incompetent. In other words, performance-oriented sales people may have sought feedback only when they knew they would meet their sales quota. Based on this rationale, feedback seeking is distinguished from *performance impression management,* defined here as the extent to which subordinates make deliberate efforts to ensure their supervisor is aware of their performance achievements. This is distinct from efforts to manage others' first impressions in new situations. Short-term workers with a competitive PGO or with performance-oriented

supervisors will engage in performance impression management when they evaluate minimal discrepancies between their performance goals and actual achievements in their job. Consequently, performance impression management should be most likely to occur near the end of the job, as a final performance evaluation is imminent. By this point, a worker's performance achievements should be more tangible and defensible.

In most educational and work settings, LGO generally motivates adaptive self-regulation activities, while PGO motivates maladaptive activities (e.g., Payne et al., 2007). For example, as chapter 2 noted, PGO is associated with help seeking avoidance, fear of failure, and focusing attention and effort on activities that do not contribute to learning and self improvement (Elliot et al, 1999; Karabenick, 2005; Lee et al, 2003; McGregor & Elliot, 2002; VandeWalle & Cumings, 1997). I have argued this distinction between an adaptive LGO and a maladaptive PGO is less pertinent in a short-term context when both learning and performance must be achieved. For example, feedback seeking and performance impression management should help short-term workers perform better. In other words, short-term workers who adopt both learning and performance goals should be more likely to engage in self-regulation activities that promote their own learning and performance, than those who adopt only one goal or the other. Similarly, supervisor goal orientations should motivate subordinates to fulfill supervisor expectations by engaging in activities that promote their learning and performance.

Several specific relationships between goal orientations and self-regulation activities have been proposed. A company LGO will motivate career networking to learn about the employer. Competency and supervisor LGO will motivate the use of learning strategies to keep effort and attention focused on skill development, and feedback seeking to improve skills. PGO will motivate workers to highlight their achievements to supervisors. An alternative hypothesis

for short-term workers is PGO also will be positively related to feedback seeking. This is because they will view the performance benefits as outweighing the social costs given the time constraints in their jobs.

Hypothesis 5a: Company LGO will be positively related to career networking.

Hypothesis 5b: Competency and supervisor LGO will be positively related to both learning strategies and feedback seeking.

Hypothesis 5c: Competitive and supervisor PGO will be positively related to performance impression management, though not to feedback seeking.

Alternative Hypothesis 5c: Competitive and supervisor PGO will be positively related to both performance impression management and feedback seeking.

3.2.6 Effects of socialization tactics on self-regulation activities

Socialization tactics also should influence workers' self-regulation activities by signaling organizational priorities for worker learning and performance, and by providing them structured opportunities to learn from others. Specifically, socialization tactics should be positively related to career networking, learning strategies, feedback seeking, and performance impression management.

Socialization tactics will provide workers with structured and interpersonal experiences to participate in career networking. For example, workers who experience planned, sequential job training (i.e., content and context tactics) and relationship building opportunities (i.e., social aspects tactics) will have more chances to interact with organizational members than those deprived of these experiences. Socialization tactics also signal the employer places a high

priority on worker learning and development. Workers will interpret this signal to mean that skill development is an important part of their job, This will motivate them to use learning strategies. Social aspects tactics provide role models and mentors that help people feel socially supported in their jobs (Bauer et al., 2007; Jones, 1986). These socially supportive relationships will reduce the costs and increase the benefits of feedback seeking by providing a work environment that encourages learning and exploration (VandeWalle et al., 2000). Consequently, socialization tactics will be positively related to feedback seeking.

For short-term workers in particular, additional mechanisms are relevant for explaining the relationship of socialization tactics to self-regulation activities. The employer's use of socialization tactics for short-term workers signals the employer's interest in hiring regular fulltime candidates (Baron & Kreps, 1999). Workers will interpret this signal to mean they should learn about career experiences inside the organization, which will motivate them to engage in career networking. The emphasis on learning implied by socialization tactics also indicates to workers that learning is an important part of the firm's regular fulltime employment criteria, which will motivate them to engage in learning strategies. Because the employer is signaling an interest in hiring the highest performing short-term workers for regular fulltime jobs, workers will be motivated to engage in performance impression management. By ensuring their supervisor knows how well they are performing their job, they will should increase their chances of receiving a fulltime job offer.

Thus, socialization tactics provide short-term workers with structured and interpersonal opportunities to engage in career networking. They encourage the use of learning strategies by signaling that learning is important for their job. They also encourage feedback seeking by reducing its social costs through socially supportive relationships. Finally, socialization tactics

motivate performance impression management so workers can increase their chance of receiving a regular fulltime job offer.

Hypothesis 6: Socialization tactics will be positively related to career networking, learning strategies, feedback seeking, and performance impression management.

3.2.7 Mediating role of self-regulation activities

I have argued goal orientations and socialization tactics affect workers' learning and performance outcomes (H1-4), and the self-regulation activities by which they pursue each outcome when they start a new job (H5-6). Self-regulation activities also should affect learning and performance, and therefore should mediate the relationships between both goal orientations and socialization tactics, and these outcomes.

Career networking will positively affect company learning by adding to workers' knowledge of their employer as they solicit information about people's career experiences in the organization. Learning strategies will positively affect competency learning by keeping short-term workers' attention and effort focused on skill development. Learning strategies also will affect performance by enabling the transfer of learned skills into job-relevant behaviors (Ford et al., 1998; Kozlowski et al., 2001; Seijts et al., 2004), and by deliberately applying prior experience to the job context. Feedback seeking will positively affect both learning and performance by enabling workers to identify the skills they want to improve so they can develop specific plans to improve these skills (Ashford & Tsui, 1991; Taylor, Fisher & Ilgen, 1984). It also will cause supervisors to evaluate them more favorably by signaling strong motivation to improve their skills and performance (Ashford et al., 2003). Performance impression

management indicates workers have achieved or are about to achieve tangible demonstrations of their performance. In this regard, it does not cause performance, but indicates the worker is performing well. Supervisors who become aware of these accomplishments will evaluate their subordinates more favorably.

Given these proposed effects of self-regulation activities on learning and performance, self-regulation activities play a mediating role in the relationship of both goal orientations and socialization tactics, to both learning and performance outcomes. Alternative hypotheses were argued earlier based on the unique features of the short-term job context. Alternative hypotheses predicted PGO will be related to feedback seeking (cf. Hypothesis 5c), and socialization tactics will be related to learning, but not to performance (cf. Hypothesis 4). Consequently, I present corresponding alternative hypotheses here.

Hypothesis 7a: The relationship of company LGO to company learning will be mediated by career networking.

Hypothesis 7b: The relationship of competency and supervisor LGO to competency learning and performance will be mediated by feedback seeking and learning strategies.

Hypothesis 7c: The relationship of competitive and supervisor PGO to performance will be mediated by performance impression management, though not feedback seeking.

Alternative Hypothesis 7c: The relationship of competitive and supervisor PGO to performance will be mediated by performance impression management and feedback seeking.

Hypothesis 8a: The relationship of socialization tactics to company learning will be mediated by career networking.

Hypothesis 8b: The relationship of socialization tactics to competency learning will be mediated by learning strategies and feedback seeking; the relationship of socialization tactics to performance will be mediated by learning strategies, feedback seeking, and performance impression management.

Alternative Hypothesis 8b: The relationship of socialization tactics to competency learning will be mediated by learning strategies and feedback seeking.

3.3 Summary

I developed a theoretical model to explain how both learning and performance occur when people start a new job, with specific attention to short-term workers. The model has four distinct features. First, worker goal orientations, supervisor goal orientations, and socialization tactics explain unique variance in learning and performance outcomes. Second, LGO and PGO affects each outcome through different self-regulation activities. For example, only competitive PGO motivates workers to highlight their achievements to their supervisors (performance impression management), which then is related to performance. Third, short-term workers with the most positive outcomes will adopt both learning and performance goals, have learning-oriented supervisors, and experience socialization tactics. Finally, the model challenges the prevailing finding in the literature that only learning goals are adaptive in work and educational settings (Payne et al., 2007). An implication of the model is both learning and performance goals are adaptive for short-term workers. Performance goals keep their effort and attention focused on performing well enough to get a regular fulltime job offer or an endorsement that helps their

future job prospects. Learning goals keep their effort and attention focused on skill improvement. Chapter 4 describes the context and methods used to test the theoretical model.

Chapter 4: Research Methods

4.1 Overview

This chapter describes the research sample, design and data collection procedures used to test the theoretical model. It also describes the measures used in this study, and their validity and reliability.

4.2 Research Sample

MBA internships were selected as a field research setting because they are short-term, fulltime jobs with substantial responsibilities, consistent with the intern's professional aspirations. These jobs are performed over 2-3 months during the summer after the first year of the MBA program. Interns usually complete a work assignment in which they are relatively inexperienced. For example, a former industrial engineer with no prior marketing background may develop a market growth strategy for a consumer products company. The intern typically presents the results of his or her work activities to executives and managers at the end of the internship. Internships generally are not part of the formal requirement to complete the MBA degree. However, they provide experience that can affect an MBA student's employment prospects after graduating.

To recruit study participants, career services directors were contacted at 15 schools recently ranked in the top 30 among MBA programs in the U.S. (U.S. News and World Report, 2007; 2008). Career services directors for 10 programs representing about 3360 fulltime MBA students consented to include their schools in the study. There were 775 class of 2008 MBA interns enrolled in these 10 fulltime MBA programs who consented to participate in this study

(23% response rate). This is consistent with response rates for comparable populations (Beenen, 2007; Cycota & Harrison, 2006). Survey data was collected over three time periods. A total of 475 interns who completed all three surveys comprise the study sample (61% retention across 3 surveys). These respondents were representative of the population of fulltime MBA students at the 10 participating schools. They study sample was 37% female, had an average of 5 years of prior work experience, and reported average Graduate Management Admissions Test (GMAT) scores of 690. The population was 36% female, had 4.9 years experience, and averaged 688 on the GMAT. Sample participants who were excluded from the analysis because they did not complete all three surveys were 31% female, had 5.1 years experience, and averaged 689 on the GMAT.

The 10 full-time MBA programs were located throughout the United States. Based on recent U.S. News and World Report rankings (2008), one school ranked in the top 5, two schools ranked in the top 10-15, and seven schools ranked in the top 15-30. Internships across highly ranked schools are comparable. For example, leading management consulting firms or financial services firms hire MBA interns from each of the 10 schools. Interns hired into these positions generally have similar levels of responsibility. Interns worked for over 315 employers[1] in industries that included consulting (15%), financial services (30%), manufacturing or consumer goods/services (28%), technology or healthcare (21%), and non-profit/utilities (6%). Some schools have specific strengths. One school is known for its program in consumer products marketing, and three other schools are known for their programs in finance. It therefore was important to control for the intern's school and employer industry using categorical variables (cf. Section 4.4.5). Appendix A-1 summarizes participant characteristics by school and industry.

[1] Excluding 48 participants who declined to identify their internship employers.

4.3 Research Design and Data Collection Procedures

Data were collected from interns using internet-based surveys before, during and after the internship. To recruit study participants, MBA career services directors sent an invitation email to about 3,360 fulltime MBA students enrolled in the 10 participating schools 1-3 weeks before their internships started. The email contained a link to survey 1, which focused on intern goal orientations and internship information. All survey 1 items were completed by 721 interns (21.5% response). About 5 weeks after each intern's start date, survey 2 was sent and completed by 527 interns (73% retention). Survey 2 focused on socialization tactics and intern demographic information. Survey 3 was sent about 1-2 weeks after each intern's end date and completed by 523 interns (73% retention). Survey 3 included the mediating variables to assess interns' self-regulation activities over the duration of their jobs, and to test longitudinal relationships between socialization tactics and the mediators. Supervisor goal orientations were measured in survey 3 to assess interns' perceptions of their supervisors over the duration of their job. Survey 3 also measured learning and performance outcomes, and asked participants to nominate a primary supervisor to complete a brief survey. The main purpose of the supervisor survey was to validate the intern's self-reported performance. A total of 101 interns nominated a supervisor (20%), and 74 supervisors responded to the survey (74%). All analyses were conducted on the 475 interns who completed all three surveys (66% retention). Appendix B-1 to B-3 contains all three MBA intern surveys, and Appendix B-4 contains the supervisor survey.

As participation and retention incentives, interns were enrolled in a $200 lottery for completing each survey, and two $200 bonus lotteries for completing all three. Interns and supervisors also had the option of receiving personalized feedback reports after the study was completed. About 90 percent of all participants selected this option.

4.4 Study Variables

Existing measures were adapted for the predictor variables (goal orientations, socialization tactics) and one mediator variable (feedback seeking). New measures were developed for the three other mediator variables and three dependent variables. Four steps were taken to ensure the validity of the measures. First, scale items were pre-tested with Class of 2007 MBA interns from one of the sample schools using think aloud verbal protocols (Sudman, Bradburn & Schwarz, 1996). Think aloud protocols help the researcher assess the construct validity of scale items by understanding in detail how study participants will interpret each item. Second, separate correlation matrices were generated for each scale to assess whether any items with lower inter-item correlations were poor indicators of the relevant construct. Weakly correlated items (.30 or less) (Cohen, Cohen, West & Aiken, 2003) were flagged for possible deletion from the scale. Third, the research sample was split into two random samples of about equal size. Exploratory factor analysis (EFA) was conducted on each sample to determine if any of the flagged items should be deleted because they did not discriminate well (cf. Section 4.4.6). Finally, confirmatory factor analysis (CFA) was conducted on the retained items to assess their validity. Coefficient alphas are reported on items that were retained in the scale based on the EFA and CFA results.

Appendix A-2 displays means, standard deviations, correlation coefficients and reliability coefficients for study variables. Appendix B-5 contains individual items for each scale.

4.4.1 Predictor Variables

Intern and Supervisor Goal Orientations. Elliot and McGregor's (2001) learning-approach and performance-approach subscales were adapted to measure the three intern goal

orientations (competency and company LGO, competitive PGO) in survey 1. An example from the 3 item company LGO subscale is, "I want to learn all there is to know about working for the organization" (*1=strongly disagree* to *7= strongly agree*). The Elliot and McGregor (2001) subscales also were adapted to measure the two supervisor goal orientation scales (LGO, PGO) which were included survey 3. An example from the 3 item supervisor PGO scale is, "My supervisor wanted to determine if I could meet competitive performance standards" (*1=strongly disagree* to *6= strongly agree*). Inter-item correlations for each goal orientation subscale ranged from .47 to .72, except for one competency LGO item which correlated .30 and .31 with the other two LGO scale items, and .21 to .31 with the competitive PGO items. This item was deleted after the EFA and CFA (cf. Section 4.4.6). It is possible this item tapped into a respondent's performance motivation since the word "perform" was included in the wording ("I desire to completely master all the skills that I'll need to perform my work").

The competency LGO subscale had relatively low reliability (α=.64) for the two retained items with higher correlations, and even lower reliability when the third item (that was later deleted from the subscale) was included (α=.62). All other goal orientation subscales had acceptable reliability (company LGO α=.78; competitive PGO α=.85; supervisor LGO α=.84; supervisor PGO α=.90). The likely reason for the low reliability of the 2 competency LGO items was that one item displayed less variation ("I am highly motivated to learn new skills over and above what will be required in my internship." *M*=6.09, *S*=.89) than the other ("My internship goal is to develop new skills that are beyond what I'll need to complete my work assignment." *M*=5.63, *S*=1.21). The scale reliability was deemed marginally acceptable since .70 is a rule of thumb, not a statistical cutoff (Cortina, 1993). For example, Peterson (1994) found 25% of

coefficient alphas reported in marketing and psychology journals (e.g., Journal of Applied Psychology) were below .63.

Goal orientations are consequences of more general intentions (Fryer & Elliot, 2007). Since company LGO was a new form of goal orientation, it was important to assess its construct validity against an intern's more general intentions to pursue regular fulltime employment with the organization. Job acceptance intention is the extent to which an intern had general intentions to accept a regular fulltime job with the employer. This variable was measured in survey 1, "Suppose your internship employer offered you a full-time job with adequate pay and location. How likely are you to reject or accept this offer today?" (*1=very likely to reject to 6=very likely to accept*). To assess the criterion validity of the company LGO measure, company LGO was regressed on two controls in step 1 (intern school and job industry, cf. section 4.4.5), followed by job acceptance intention in step 2. The change in model fit indicated a significant positive relationship between job acceptance intention and company LGO (N = 522, ΔR^2 = .054, ΔF=30.5, p <.001, β=.24, t(512)=5.52, p < .001). This result supports the construct validity of the company LGO measure.

Socialization Tactics. Ten items were adapted from Jones' (1986) three socialization tactics subscales to assess content (4 items), context (3 items) and social aspects tactics (3 items) (α=.89). These items were included in survey 2. Respective Preceded by the stem, "*My internship employer provides MBA interns the opportunity to…*"(*1= No opportunity* to *5=Great deal of opportunity*), examples from each subscale are "receive a formal orientation to the job setting" (context); "have a clear understanding of a timetable of events for the internship" (content); and "receive guidance from senior colleagues" (social aspects). A higher number on this scale indicates a respondent's experiences with institutionalized tactics, while a lower

number indicates experiences with individualized tactics (Jones, 1986). The social aspects subscale items had the lowest correlations to content and context subscale items (from .28 to .43). Inter-item correlations within each subscale ranged from .35 to .76. This is consistent with prior research that shows the subscales can load on a single factor or separate factors (e.g., Ashforth et al., 2007; Ashforth & Saks, 1997; Bauer et al., 2007; Jones, 1986). Based on the EFA and CFA results (cf. section 4.4.6), all 10 items were retained as one socialization tactics scale.

4.4.3 Mediating Variables

Career networking. A new career networking scale that was developed and used in a previous study (Beenen, 2008) also was used in this study (α=.82). The three item measure was based on Ashford and Black's (1996) proactive networking scale. Inter-item correlations for this measure were .59 to .61. An example item is, "I talked to people outside my department or work area to learn how their careers developed" (*0=to no extent* to *5=to a very great extent*). All the mediating variables were measured in survey 3.

Feedback seeking. A three item scale adapted from Callister et al. (1999) measured feedback seeking. Two versions of the scale targeted "your primary manager" (α=.88) and "others in your employer organization" (α=.86). Both scales had inter-item correlations from .65 to .81. One item is "I solicited critiques from my primary manager (others with expertise in my work area)" (*0=to no extent* to *5=to a very great extent*). A second set of feedback seeking measures were included in survey 2 in order to conduct two tests of the competing hypotheses (H4d and alternative H4d). The survey 2 measures had acceptable reliability for feedback seeking that targeted managers (α=.86) and others (α=.86). The survey 2 and 3 test-test reliability was .64 and .54 respectively. Inter-item correlations for these scales ranged from .63 to .80.

Performance impression management. A new performance impression management scale was developed using Yun, Takeuchi and Liu's (2007) self-enhancement scale as a guide. One item (reverse scored) had low inter-item correlations (from -.03 to -.10). Correlations for the other three items ranged from .55 to .67 (α=.89). An example item is "I tried to make sure my manager valued all my work accomplishments" (*0=to no extent* to *5=to a very great extent*).

Learning strategies. The Motivated Styles of Learning Questionnaire (MSLQ) (Pintrich et al., 1991) was used as a guide to develop a new 6 item learning strategies scale. Two items had low inter-item correlations (.19 to .27 for one item, .25 to .34 for the other). Correlations for the other 4 items ranged from .49 to .77 (α=.85). An example from the scale is "During my internship, I put a lot of effort into further developing skills I learned during business school" (*1=strongly disagree* to *7=strongly agree*).

4.4.4 Dependent Variables

Competency learning. A new competency learning index measured an intern's perceived changes in ten skills important to MBA employers (Graduate Management Admissions Council, 2005). An example is "Making decisions with imperfect information" (*-2 =Worse*, to *0=Not changed*, to *+2=moderately improved to +4=very much improved*). These responses were converted to a 7 point score by adding 3 to each respondent's score (e.g, -2+3=1; +4+3=7). The lowest mean response was 3.78 (*S*=1.0) for "Negotiation skills" (between *0=not changed* and *1=a little improved*), and the highest was 4.97 (*S*=1.2) for "Thinking strategically about business problems" (*2=moderately improved*). This suggests respondents did not have inflated competency learning ratings on average. A reliability coefficient is not presented for these items because they were not intended to fit any *a priori* factor structure (Edwards & Bagozzi, 2000).

Company learning. A new 6 item scale developed in a previous study (Beenen, 2008) also was used in this study (α=.85). An example is "I expanded my knowledge of the kind of work MBAs do in this organization" (*1=Strongly disagree* to *7=Strongly agree*). Inter-item correlations ranged from .48 to .72.

Performance. A new self-reported performance scale was developed because third-party performance reviews could not be obtained for this study. Interns assessed their work quality "compared to others your employer may consider hiring." For example, an intern rated the quality of "my analytical work", and "work deliverables I completed during my internship" (*1=far below average* to *7=far above average*). Two item items on this scale had low correlations with at least 2 other items (.24 and .26 for one, .30 and .30 for the other). Inter-item correlations for the 4 other items ranged from .38 to .75. Based on the EFA and CFA results (cf. section 4.4.6), only the item with the lowest inter-item correlations was deleted from the scale. The 5 retained items had acceptable reliability (α=.85).

To test the construct validity of the self-rated performance measure, it was compared to a different performance measure provided by supervisors and interns. Of the 101 supervisors nominated by interns, 74 answered the question, "Did the intern who reported to you receive a full-time job offer?" Based on the assumption that higher performing interns were more likely to receive fulltime job offers from employers than lower performing interns (after controlling for variation across schools and industries), a yes answer to this question indicates an intern met some objective performance standard.[2] To test the relationship of self-rated performance to this

[2] It could be possible that higher performing interns are not offered jobs because employers do not expect them to accept their offers, while lower performing interns are offered jobs because employers do expect them to accept their offers. These circumstances seem unlikely for several reasons. First, interns generally should be highly motivated to secure a fulltime job offer because it provides them job search leverage with other potential employers (e.g., Boswell, Boudreau & Dunford, 2004). Consequently, it seems unlikely that interns would accept an internship with an employer only to give that employer the impression that they are uninterested in a fulltime job offer. Second, under most circumstance, it is unlikely that employers would lower their performance standards or prefer to make

alternative dichotomous performance measure, a logistic regression model was run with the dichotomous performance measure (0=no job offer made to intern, 1=job offer made to intern) regressed on two controls in step 1 (intern school and job industry, cf. section 4.4.5), followed by the subjective performance scale in step 2. The model log likelihood change was significant in step 2 (N=74, $p < .05$), and there was a 329% greater chance that supervisors expected a job offer to be made to an intern for each 1 point increase (on a 7 point scale) in the intern's self-rated performance (log odds = 3.29, $p < .05$). Interns also responded to the same job offer question and their responses strongly correlated with supervisor responses (N=74, $r = .58$). The same model run with interns' responses (N= 526, $p < .001$) there was a 184% greater chance that interns expected to get a job offer with each 1 point increase in self-rated performance (log odds = 1.84, $p < .001$). These results support the construct validity of the performance scale.

4.4.5 Control Variables

Collaborative job responsibilities. Some jobs may provide opportunities to learn and engage in activities such as seeking feedback or career networking simply because they require more collaboration with others. To account for this possibility, survey 2 included a three item from task collaboration scale (Van Der Vegt, Emans & Van De Vhert, 2000). An item from this scale is "I need to collaborate with my colleagues to perform my job well." (1=strongly disagree, 6=strongly agree). One item (reverse scored) had low correlations with the other two (less than -.30). Reliability was lower for the three items ($\alpha=.60$) than the other two items ($\alpha=.78$) that were more strongly correlated ($r = .56$). The reverse-scored item was deleted from the scale based on its effect on scale reliability and based on the EFA and CFA results (cf. section 4.4.6).

---

early offers to lower performing interns than to higher performing interns. This would send a strong signal to both current and potential employees that inferior performance is rewarded.

Intern school. Interns from the same school may share characteristics or experiences. For example, some of the schools in the research sample are more highly ranked than others (e.g., top 5 versus top 20). Any systematic school or industry effects would violate the independence of observations assumption of linear regression (Cohen et al., 2003). One way to control for such effects in a regression model is to use 9 dummy codes to represent the schools.[3] A drawback of this approach is a large number of control variables can capitalize on chance that any particular coefficient is significant (Cohen et al., 2003). To reduce the number of control variables, schools were collapsed into 5 groups corresponding to recent U.S. News and World Report (2007; 2008) business school rankings[4]: 1) one school ranked in the top 5 (N=75); ,2) two schools ranked 5-10 (N=108); 3) three schools ranked 11-15 (N=143); 4) one school ranked 16-19 (N=33); and 5) three schools ranked 20-30 (N=119). In the regression analysis (cf. chapter 5), models that controlled for all school categories (9 dummy variables) were compared to models that controlled for the collapsed categories (4 dummy variables) to ensure the groups accurately represented each category (cf. chapter 5).

Intern job industry. It is also possible that some industries may offer different job experiences for interns. For example, consulting and investment banking firms may be more

[3] An alternative way to estimate school (and industry) effects is a cross-classified random effects model called HCM2 (Raudenbush & Bryk, 2002). HCM2 is a type of hierarchical linear model (HLM) in which a smaller number of categories (e.g., industries) are nested within a larger number of categories (e.g., schools). HCM2 identifies intra-cell correlations within each category (e.g., extent to which responses from the same school or industry are correlated). I also consulted with Dr. Anthony Bryk (co-developer of HCM2 and HLM) and he indicated dummy variables to represent schools and industries are appropriate for the data set in this study. HCM2 is more appropriate for larger data sets, and for hypothesis testing without interactions. Nonetheless, I did an HCM2 analysis with each of the three dependent variables regressed on school/industry level variables. This analysis found a significant school-level effect that accounted for about 2% of the variance in competency learning. No other school/industry level effects were found. The regression models reported in chapter 5 corroborated this finding as only the school dummy variables explained significant variance in competency learning. School and industry dummy variables did not explain significant variance in company learning or performance.

[4] U.S. News rankings were used because they rely less on student and alumni ratings data and consequently are more stable than the BusinessWeek rankings. Comparing 2008 to 2007 U.S. News rankings, 5 schools were unchanged, 2 schools moved up or down by 1 slot, 1 school moved down by 2 slots, 1 moved down by 4 slots, and 1 moved down by 5 slots.

accustomed to hiring MBA interns and therefore may have more experience providing them developmental internship experiences. This also would violate the independence of observations assumption of linear regression. To account for these effects, industries were grouped into 5 logical categories 1) consulting (N=66); 2) banking and financial services (N=126); 3) consumer products and manufacturing (N=140); 4) technology and healthcare/pharmaceuticals (N=102); 5) and government/non-profit and utilities (N=40).

4.4.6 Discriminant validity of measures

Since this study used both new and adapted measures, exploratory factor analysis (EFA) was done to further assess whether any of the items found to have low inter-item correlations should be dropped because they did not discriminate well. Confirmatory factor analysis (CFA) was then conducted to determine if the measures were statistically valid. The competency learning items were not included in the EFA or the CFA because this scale was intended to represent a range of skills, not a pre-conceived factor structure (Edwards & Bagozzi, 2000).

Exploratory factor analysis (EFA). The data set was split into two random samples of roughly equal size (N=233 and N=241) and EFA was conducted on the 58 items contained in 14 scales for each sample (Principal Axis, Varimax Rotation, Eigenvalues > 1). Each EFA yielded comparable results. For the first sample (N=233, 15 factors, 69.3% cumulative variance), 14 factors corresponded to items contained in each scale. Factor 15 included 3 social aspects tactics items that had similar loadings on factor 1 (which contained the other 7 socialization tactics items). For the second sample, (N=241, 14 factors, 69.2% cumulative variance) each factor corresponded to the 14 scales. The 6 items with low inter-item correlations did not discriminate well in the EFA and were dropped from all subsequent analyses. Appendix B-5 displays all the

scale items, including the 52 retained items, and 6 deleted items. The 6 deleted items include 1 competency LGO item, 1 performance impression management item, 2 learning strategies items, 1 performance item, and 1 task collaboration item. The social aspects tactics items were retained because they shared the same factor as the other 7 socialization tactics items for both EFA samples. Appendix B-6 displays EFA results.

Confirmatory factor analysis (CFA). Two *a priori* CFA models (6-factor predictor model, and 7-factor mediator and dependent variable model) were tested on the retained measures. The 6-factor *a priori* model included all predictor variables (3 goal orientations, 2 supervisor goal orientations, and socialization tactics). The 6-factor model had adequate fit (RMSEA = .05; CFI = .94; IFI = .94). The 7-factor *a priori* model included all mediators and 2 outcome variables (5 self-regulation activities, 2 outcomes including performance and company learning). The 7-factor *a priori* model also had adequate fit (RMSEA = .04; CFI = .95; IFI = .95).

It may be possible that the self-reported measures used in this study produced a common methods factor (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). To assess this possibility, Harman's single-factor test was conducted in which a single latent variable replaces the theoretical latent factors (Podsakoff et al., 2003). The single factor model did not fit the data for the predictors (RMSEA = .14; CFI = .44; IFI = .44) and the mediators and outcomes (RMSEA = .13; CFI = .42; IFI = .43). As a second test to assess the possibility of a common methods factor, an unmeasured latent methods factor was added to each model that included measures as indicators (Podsakoff et al., 2003). A 7-factor predictor model (adding 1 unmeasured latent factor) had slightly better fit for all three indices (RMSEA = .04; CFI = .97; IFI = .97), and an 8-factor mediator and outcome model (adding 1 unmeasured latent factor) had slightly better fit for

two of three indices (RMSEA = .04; CFI = .96; IFI = .96). Given these small differences, a single common methods factor did not appear to be a problem with the measurement model.

4.5 Analysis Strategy

All hypotheses were tested with multivariate multiple regression analysis using SPSS version 15. Mediation analysis (Kenny, Kashy & Bolger, 1998) and Sobel tests (Sobel, 1982) also were used for hypotheses 7-8. When predictor variables are added to the models, the R^2 changes (change in F statistic) and coefficients (t statistic) were checked for statistical significance. The 95% confidence intervals also were examined to assess the effect size of each coefficient (Cohen, 1995).

Two additional steps were taken to ensure the school and industry-level dummy variables adequately controlled for effects that may otherwise violate the independence of observations assumption. First, the distribution of residuals for each regression model was visually inspected for normality using both histograms and observed versus expected cumulative probability plots. Consistent with the independence assumption, residuals appeared to be normally distributed. Second, the same models were run using 9 dummy variables representing 10 schools (instead of 4 dummy variables representing 5 school categories based). Both sets of models produced the same results. These steps indicate school and industry-level effects were adequately controlled for in the analyses.

Chapter 5: Analysis and Results

5.1 Overview

This chapter describes the analysis and presents the results of the 8 hypotheses using regression and mediation analysis.

5.2 Results

5.2.1 Descriptive Statistics and Correlations

Table 5-1 displays descriptive statistics and correlations for the study variables. Appendix A-1 contains a more complete correlation matrix including dummy variables representing school and industry categories. Table 5-2 summarizes the predicted relationships for hypotheses 1-6. Figures 5-2 to 5-4 display the predicted relationships for hypotheses 7-8.

Table 5-1: Means, Standard Deviations and Correlations of Study Variables

		M	*S*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Comptency LGO (t1)	*5.9*	*.91*	---															
2	Company LGO (t1)	*6.0*	*.76*	.09	---														
3	Competitive PGO (t1)	*5.1*	*1.3*	.25	.14	---													
4	Supv. LGO (t3)	*4.2*	*1.1*	.04	.07	.03	---												
5	Supv. PGO (t3)	*4.5*	*1.0*	-.02	.11	.10	.66	---											
6	Socialization tactics (t2)	*3.6*	*.80*	-.02	.13	.01	.38	.44	---										
7	Competency learning (t3)	*4.4*	*.80*	.18	.09	.07	.49	.37	.21	---									
8	Company learning (t3)	*5.7*	*.92*	.03	.23	.11	.36	.40	.41	.28	---								
9	Performance (t3)	*5.6*	*.80*	.11	.04	.11	.29	.28	.10	.33	.25	---							
10	Career networking (t3)	*4.3*	*1.1*	.10	.17	.08	.25	.26	.31	.34	.35	.20	---						
11	Feedbk. skg. (supv.) (t3)	*4.2*	*1.1*	.09	.09	.14	.37	.40	.29	.35	.24	.28	.38	---					
12	Feedbk. skg. (others) (t3)	*3.6*	*1.1*	.13	.09	.16	.25	.28	.27	.42	.23	.22	.60	.54	---				
13	Feedbk. skg. (supv.) (t2)	*4.2*	*1.1*	.11	.09	.15	.33	.35	.43	.28	.29	.24	.33	.63	.43	---			
14	Feedbk. skg. (others) (t2)	*3.6*	*1.2*	.12	.08	.15	.24	.25	.38	.32	.18	.12	.37	.38	.55	.59	---		
15	Perf. impr. mgmt. (t3)	*4.2*	*1.0*	.11	.14	.18	.30	.32	.21	.33	.24	.32	.38	.60	.40	.39	.25	---	
16	Learning strategies (t3)	*4.2*	*.93*	.15	.06	.05	.41	.33	.23	.56	.26	.12	.23	.24	.30	.21	.25	.26	---
17	Task collaboration (t2)	*4.9*	*.93*	.01	.13	.04	.16	.25	.24	.17	.20	.05	.28	.17	.25	.16	.19	.18	.24

It is important to highlight some of the weaker and stronger correlations among scales. As a rule of thumb, correlations can be classified as weak (r =.10 to .30), moderate (r=.30 to .50) or strong ($r \geq$.50) (Cohen et al., 2003). Competency and company LGO are weakly correlated (r

= .09), indicating these are distinct forms of learning goals. Competency LGO and supervisor LGO (r = .04), and competitive PGO and supervisor PGO (r = .10) also are very weakly correlated. This suggests short-term workers' assessments of their supervisors' goal orientations were not merely projections of their own goal orientations. Predictor variables with strong inter-correlations focused on the same target (e.g., supervisor LGO and PGO, r = .66), or similar kinds of behaviors (e.g., seeking feedback from supervisors and others, r = .54). Strong correlations between predictor variables may indicate collinearity which results in coefficients with large standard errors. With more than two predictors in a regression model, variance inflation factor (VIF) is a better statistic for assessing collinearity than a correlation coefficient (Cohen et al., 2003). The square root of the VIF statistic estimates the amount the standard error of a coefficient will increase compared to a situation in which no predictors in the model are inter-correlated. For example if VIF = 9, the standard error of a coefficient is 3 times higher than a situation in which predictors are uncorrelated. As a rule of thumb in behavioral science, a VIF above 6 or 7 indicates a predictor variable has a collinearity problem (Cohen et al., 2003). VIF was calculated for all coefficients in each regression model to ensure there were no collinearity issues. VIF was less than 2 in each regression model, indicating no collinearity issues.

Table 5-2: Summary of Predicted Relationships (Hypotheses 1-6)

Hypotheses	Predictors	Outcomes			Mediators			
		Compcy. Lrng.	Compy. Lrng.	Perf.	Career netwkg.	Fdbk. Skg.	Lrng. strat.	Perf. imp. mgt.
H1a, 5a	Company LGO	Ø	+	Ø	+	Ø	Ø	Ø
H1b, 5b	Competency LGO	+	Ø	+	Ø	+	+	Ø
H1c, 5c/alt	Competitive PGO	Ø	Ø	+	Ø	Ø /+	Ø	+
H2a, 5b	Supv. LGO	+	Ø	+	Ø	+	+	Ø
H2c, 5c/alt	Supv. PGO	Ø	Ø	+	Ø	Ø /+	Ø	+
H4/alt, 6a-c	Soc. Tact.	+	+	Ø /+	Ø	Ø	Ø	Ø
H3a	PGO X Supv. LGO	+	Ø	+	Ø	Ø	Ø	Ø
H3b	LGO X Supv. PGO	–	Ø	–	Ø	Ø	Ø	Ø

Notes. + = positive relationship predicted; – = negative relationship predicted; Ø = no relationship predicted. alt = alternative hypothesis

5.2.2 Hypotheses 1 Results

Hypothesis 1 predicted positive relationships between company LGO and company learning (1a), between competency LGO and both competency learning and performance (1b), and between competitive PGO and performance (1c). To test hypothesis 1, each of the three dependent variables were regressed on the controls (block 1), followed by the three predictor variables (block 2). Table 5-3 shows company LGO was positively related to company learning,

Table 5-3: Learning and Performance Regressed on Goal Orientations

	DV: Company Learning		DV: Competency Learning		DV: Performance	
Variable	β	*t*(464)	β	*t*(464)	β	*t*(464)
Competency LGO	-.02	-.035	.16	3.36***	.07	1.40
Company LGO	.20	4.27***	.07	1.40	.04	0.79
Competitive PGO	.10	2.08*	.02	0.41	.09	1.85+
Total R^2		.109***		.093***		.057**
Change in R^2		.049***		.032***		.018*

Notes. Block 2 model displayed. Block 1 includes controls. $p < .001$. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

which supports hypothesis 1a. Competitive PGO had an unexpected positive relationship to company learning (β=.10, *t*(464)=2.08, *p* <.05). It is possible that interns who were motivated to perform well were interested in getting a regular fulltime job offer. Their interest in a fulltime job offer also may have motivated them to learn more about regular employment opportunities inside the organization. Competency LGO was positively related to competency learning as expected, though not to performance. This partly supports hypothesis 1b.

Table 5-3 shows competitive PGO was positively related to performance (β=.09, *t*(464)=1.85, *p* =.07) though the 95% confidence interval for Beta included 0 (-.003 to .11). The self-report performance scale used anchors that compared one's own performance to average performance (1=far below average, 7=far above average). Because of this, it may be possible the relationship of competitive PGO to performance was suppressed by better-than-average effects

(Moore, 2007) whereby people rated themselves highly with little variation. For example, the mean performance score was high and showed little variation (M=5.82, S = .80). In fact, 34 participants rated themselves as perfect performers (7 out of 7) on at least 4 of the 5 scale items (total performance score $\geq$ 6.8). When the model was rerun with these 34 responses (performance scores $\geq$ 6.8) dropped from the model, competitive PGO was positively related to performance (β=.10, t(430)=2.01, p <.05), though the block 2 model R^2 did not change significantly (ΔR^2 =.013, F=1.95, p =.12). Two logistic regression models also were run (with and without the 34 responses with performance scores > 6.8). The alternate dichotomous performance measure (0=no job offer received, 1=job offer received) was regressed on the controls (block 1) and three goal orientations (block 2). With all responses included in the model, there was a 18% greater likelihood of receiving a job offer for each 1 point increase in competitive PGO (log odds = 1.18; p <.05). The change in log likelihood for the model, however, was not significant (p = .07). With the 34 responses dropped from the model, there was a 15% greater likelihood of receiving a job offer for each 1 point increase in competitive PGO (log odds = 1.15; p =.10). These results weakly support hypothesis 1c, which predicted a positive relationship between competitive PGO and performance.

5.2.3 Hypotheses 2 and 3 Results

Hypothesis 2 predicted supervisor goal orientations have distinct positive effects on learning and performance, beyond the effects of short-term workers' own goal orientations. Specifically, supervisor LGO should be related to competency learning and performance (2a), and supervisor PGO should be related to performance (2b). To test hypothesis 2, the two supervisor goal orientations were added in block 3 to the models used to test hypothesis 1.

Because competitive PGO was positively related to company learning, company learning also was regressed on supervisor goal orientations to see if supervisor PGO had a similar relationship to company learning. For example, performance-oriented supervisors may have expected their intern subordinates to demonstrate if they could perform well enough to be offered a regular fulltime job. These supervisor expectations concerning potential employment may have motivated these interns to learn about regular fulltime job opportunities inside the organization.

Table 5-4 displays the block 3 results for the three models. VIF statistics were within acceptable range for supervisor LGO (VIF = 1.87) and PGO (VIF = 2.03). This indicates standard errors for supervisor LGO and PGO respectively are 1.37 and 1.42 times higher than a situation in which none of the predictors are correlated. This indicates collinearity was not a substantial problem for the supervisor goal orientation measures, despite their relatively high inter-correlations. As predicted, supervisor LGO was positively related to both competency learning and performance, which supports hypothesis 2a. Hypothesis 2b also was supported with a positive relationship between supervisor PGO and performance. Hypothesis 1 results were unchanged with supervisor goal orientations in the model, indicating subordinate and supervisor goal orientations explain unique variance in the outcomes. Supervisor PGO and LGO also were both positively related to company learning.

Table 5-4: Learning and Performance Regressed on Supervisor Goal Orientations

	DV: Company Learning		DV: Competency Learning		DV: Performance	
Variable	B	*t*(462)	β	*t*(462)	β	*t*(462)
Supervisor LGO	.17	3.10**	.42	7.85***	.14	2.48*
Supervisor PGO	.26	4.53***	.07	1.34	.23	3.82***
Total R^2		.247***		.298***		.162***
Change in R^2		.138***		.205***		.105***

Notes. Block 3 model displayed. Block 1 includes controls, block 2 intern goal orientations. $p < .001$. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Hypothesis 3a predicted performance-oriented interns would learn and perform better when their supervisors were highly learning-oriented. Hypothesis 3b predicted learning-oriented interns would learn and perform worse when their supervisors were highly performance-oriented. To test both hypotheses, interaction terms were calculated with centered variables (Aiken & West, 1991). The interaction terms were then added in block 4 to the models used to test hypothesis 2. Table 5-5 displays these block 4 moderation analysis results.

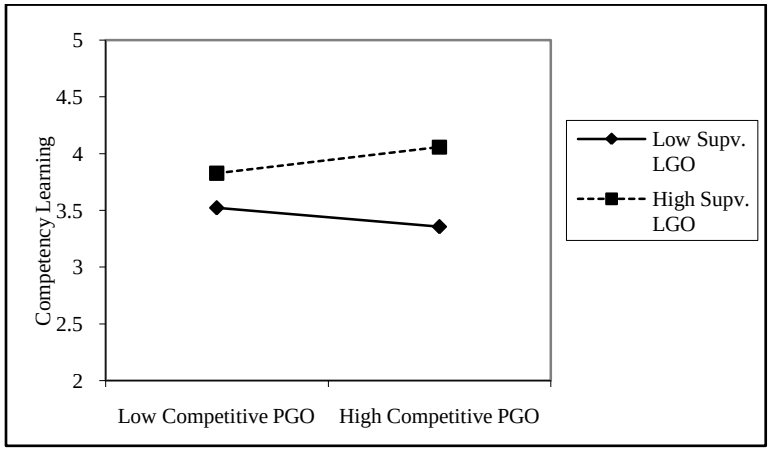
As hypothesis 3a predicted, with competency learning regressed on the moderators, the competitive PGO X supervisor LGO coefficient was positive and significant. This result means performance-oriented interns learned more (less) when they had supervisors with strong (weak) learning-orientations. The change in model fit, however, was marginally significant (ΔR^2 =.01, $F(2, 457) = 2.60$, $p = .074$). This is not surprising given the difficulties associated with finding interaction effects in field settings (McClelland & Judd, 1993). Figure 5-1 plots the interaction. When performance was regressed on the moderators, the same coefficient was negative as predicted, though it was not significant. Thus, hypothesis 3a was only partly supported. The competency LGO X supervisor PGO coefficients were not significant, so hypothesis 3b was not supported.

Table 5-5: Moderation Analysis Results

	DV: Competency Learning		DV: Performance	
Variable	β	*t*(460)	β	*t*(460)
Competitive PGO X Supv. LGO	.10	2.23*	-.02	-.41
Competency LGO X Supv. PGO	-.05	-1.01	-.02	-.48
Total R^2		.157***		.108***
Change in R^2		.01^{+}		.001

Notes. $p < .001$. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Figure 5-1: Competency Learning Regressed on Competitive PGO X Supervisor LGO



It is possible hypothesis 3b was not supported because some performance-oriented supervisors were also learning-oriented. The rationale for hypothesis 3b was learning-oriented subordinates with performance-oriented supervisors experience cognitive interference because supervisor expectations conflict with their own goal preference (Bell & Kozlowski, 2006). Yet, if their supervisors also were learning oriented, they would have experienced less cognitive interference. To test this possibility, a post-hoc analysis compared the mean competency learning and performance outcome scores for two groups of learning-oriented (above the median) interns with performance-oriented (above the median) supervisors: 1) interns whose supervisors were less learning-oriented (n=11) (below the median); and 2) interns whose supervisors were more learning-oriented (n=65) (above the median). For the preceding explanation to be supported, interns in the first group should have lower competency learning and performance scores than those in the second group. Consistent with this explanation, interns in the first group had lower competency learning (n=11, M=4.45) scores than those in the second group (n=65, M=4.75), though the difference was not significant (F(1,74)=1.36, p=.25). Interns in the first group also had lower performance scores (n=11, M=5.6) than those in the second group (n=65, M=5.78).

Again, however, the difference was not significant ($F(1,74)=.50$, $p=.48$), possibly due to the smaller size (n=11) of the first group.

5.2.4 Hypotheses 4 Results

Hypothesis 4 predicted socialization tactics should positively influence short-term workers' learning and performance outcomes beyond their own goal orientations. An alternative hypothesis 4 predicted socialization tactics only would be positively be related to learning. To test both hypotheses, socialization tactics were added in block 3 to the models used to test hypothesis 1. Supervisor goal orientations were not included in these models due to the relatively high correlations between supervisor LGO and PGO, and between socialization tactics and supervisor goal orientations. Table 5-6 displays results. Socialization tactics were positively related to all three outcomes, supporting hypothesis 4. Socialization tactics had the strongest

Table 5-6: Learning and Performance Regressed on Socialization Tactics

	DV: Company Learning		DV: Competency Learning		DV: Performance	
Variable	β	*t*(463)	β	*t*(463)	β	*t*(463)
Socialization Tactics	.37	8.40***	.17	3.70***	.12	2.43*
Total R^2		.227***		.119***		.068*
Change in R^2		.118***		.026***		.012*

Notes. Block 3 model displayed. Block 1 includes controls, block 2 includes intern goal orientations. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

effect on company learning, explaining 11.8% of the variance, compared to 2.6% for competency learning and 1.2% for performance. Since hypothesis 1 results did not change with socialization tactics included in the model, worker goal orientations and socialization tactics had unique effects on the outcomes.

5.2.5 Hypotheses 5 Results

Hypothesis 5 predicted positive relationships between goal orientations and the four self-regulation activities. Separate models were run for feedback seeking targeting supervisors and other experts. To test hypothesis 5, each self-regulation activity was regressed on the controls (block 1), intern goal orientations (block 2), and supervisor goal orientations (block 3). Tables 5-7 shows the block 2 models, and 5-8 the block 3 models. Additional models also were run with the time 2 feedback measures regressed on intern goal orientations only (because supervisor goal orientations were measured later in time 3). These are displayed in Table 5-9.

Hypothesis 5a predicted company LGO will be related to career networking. This was supported. Company LGO also had an unexpected positive relationship to performance impression management. This result is somewhat surprising in that people with learning goals generally are less concerned with others' impressions of their performance than those with performance goals (e.g., VandeWalle & Cummings, 1997). A likely explanation for this result is interns with a company LGO were motivated to learn about regular fulltime job opportunities with their employers. Consequently, they may have also been motivated to make positive impressions on their supervisors to increase their chances of getting a job offer. Hypothesis 5b predicted both competency and supervisor LGO will be related to learning strategies and feedback seeking. Competency and supervisor LGO were both related to learning strategies. Competency LGO was unrelated to time 3 feedback seeking, and positively related to time 2 feedback seeking with 95% confidence intervals for Beta that included 0 (feedback targeting supervisors: -.017 to .199; feedback targeting other experts: was -.009 to .227). Supervisor LGO was positively related to feedback seeking targeted only at supervisors. These results partly support hypothesis 5b. Supervisor LGO also was positively related to performance impression

management. It is possible learning-oriented supervisors may have encouraged their subordinates to learn about regular employment

Table 5-7: Self-Regulation Activities Regressed on Intern Goal Orientations

	Career networking		Learning strategies		Feedback (Supervisor)		Seeking (Other experts)		Perf. impres. management	
Variable	B	*t*(464)	B	*t*(464)	β	*t*(464)	β	*t*(464)	β	*t*(464)
Competency LGO	.05	1.18	.13	2.87**	.06	1.29	.07	1.53	.05	1.06
Company LGO	.15	3.33***	.03	0.74	.04	0.78	.04	0.90	.10	2.23*
Competitive PGO	.04	0.96	.00	0.09	.11	2.33*	.13	2.91**	.14	3.10**
Total R^2		.135***		.093***		.064*		.133***		.092***
Change in R^2		.03***		.02*		.022*		.03**		.042***

Notes. Block 2 model displayed. Block 1 includes controls. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Table 5-8: Self-Regulation Activities Regressed on Supervisor Goal Orientations

	Career networking		Learning strategies		Feedback (Supervisor)		Seeking (Other experts)		Perf. impres. management	
Variable	B	*t*(462)	B	*t*(462)	β	*t*(462)	β	*t*(462)	β	*t*(462)
Supervisor LGO	.11	1.81^{+}	.33	5.81***	.18	3.26***	.09	1.59	.14	2.47*
Supervisor PGO	.16	2.67**	.08	1.38	.26	4.45***	.17	2.78**	.19	3.20***
Total R^2		.156***		.229***		.211***		.183***		.175***
Change in R^2		.053***		.136***		.148***		.05***		.083***

Notes. Block 3 model displayed. Block 1 includes controls, block 2 includes intern goal orientations. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Table 5-9: Time 2 Feedback Seeking Regressed on Intern Goal Orientations

	Time 2 Feedback seeking (supv.)		*Time 2* Feedback seeking (others)	
Variable	B	*t*(464)	β	*t*(464)
Competency LGO	.08	1.65^{+}	.08	1.82^{+}
Company LGO	.03	0.70	.03	0.70
Competitive PGO	.13	2.77**	.11	2.46*
Total R^2		.085***		.098***
Change in R^2		.03**		.027**

Notes. Block 2 model displayed. Block 1 includes controls. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

in the organization. This may have motivated them to increase their chances of getting a job offer by making sure their supervisors knew how well they performed. The relationship between supervisor LGO and company learning (Table 5-4), and supervisor LGO and career networking

(Table 5-8) provide indirect support for this possibility. Hypothesis 5c predicted competitive and supervisor PGO will be related to performance impression management. Alternative hypothesis 5c argued PGO also will be positively related to feedback seeking because in a short-term job the costs of appearing less competent from seeking feedback would be lower than the performance benefits (Vandewalle & Cumings, 1997). Tables 5-7 and 5-8 show competitive and supervisor PGO were both positively related to both feedback seeking and performance impression management. Table 5-9 shows competitive PGO also was positively related to time 2 feedback seeking. Alternative hypothesis 5c therefore was supported. In all the preceding models, adding supervisor goal orientations in block 3 did not change any of the block 2 results. This indicates subordinate and supervisor goal orientations explained unique variance in self-regulation activities.

Because a positive relationship between PGO and feedback seeking departs from most prior research (Payne et al., 2007), it is worth exploring this result further. If the rationale for alternative hypothesis 5c is valid, interns with performance goals who view themselves as competent should view feedback seeking as less costly than their less competent colleagues. The reason is competent interns should view the costs of appearing incompetent as minimal. Their less competent colleagues, however, should view feedback seeking as more costly since the risks of appearing incompetent are relatively higher. This suggests self-perceived competence should moderate the relationship between competitive PGO and feedback seeking. Self-perceived competence was measured at time 3 with 10 items (using the same skills as the competency learning scale) in which interns assessed their competence in each skill on a 5 point scale (*1=Novice to 5=Expert*; *M*=3.37 *S*=.50). To test the prior explanation, feedback seeking was regressed on the controls (block 1), intern goal orientations and self-competence (block 2), and a

competitive PGO X self-competence interaction term (block 3). Consistent with the explanation, the moderator was significant and positive for feedback seeking targeting supervisors (β= .11, $t(457)= 2.67$, $p < .01$), though not for feedback seeking targeting other experts (β= .07, $t(457)= 1.79$, $p = .075$). The marginal significance of the second coefficient is not surprising given the number of factors that reduce the likelihood of finding significant interactions in field studies (McClelland & Judd, 1993). Overall, these results indicate performance-oriented interns who were more confident in their skills were more likely to seek feedback from a supervisor than those who were less confident in their skills.

5.3.3 Hypothesis 6 Results

Hypothesis 6 specified positive relationships between socialization tactics and career networking (6a), learning strategies (6b) and feedback seeking (6c). These effects were expected to be distinct from the effects of workers' own goal orientations. To test hypothesis 6, each self-regulation activity was regressed on the controls (block 1), followed by intern goal orientations (block 2) and socialization tactics (block 3). Table 5-10 displays the results of each block 3 model. Two more models displayed in Table 5-11 were run with time 2 feedback seeking regressed on socialization tactics. As expected, socialization tactics were positively related to career networking, learning strategies, and feedback seeking that targeted both supervisors and other experts. Socialization tactics also were positively related to time 2 feedback seeking. With socialization tactics in the model, the relationships between individual goal orientations and self-regulation activities were unchanged—with one exception. The 95% confidence interval for the relationship of competency LGO to time 2 feedback seeking no longer included 0 (feedback

targeting supervisors: β= .09, $t(463)= 2.06$, $p < .05$; feedback targeting other experts: β= .09, $t(463)= 2.13$, $p < .05$). These results support hypotheses 6a, 6b and 6c.

One explanation for why competency LGO was related to feedback seeking at time 2 but not time 3 is there was less opportunity to improve skills at the end of the job than there was at the midpoint. The midpoint may have provided a natural milestone (Gersick, 1989) in which learning-oriented workers could assess their learning progress and have enough time to take corrective actions to improve their skills. Near the end of the job, there would be less time available to focus on skill improvement. Performance-oriented workers, however, may have wanted to demonstrate their initiative to improve their performance both at the midpoint, and just before their performance evaluation.

Table 5-10: Self-Regulation Activities Regressed on Socialization Tactics

	Career networking		Learning strategies		Feedback seeking (Supervisor)		(Other experts)		Perf. impres. management	
Variable	β	$t(463)$	β	$t(463)$	β	$t(463)$	β	$t(463)$	B	$t(463)$
Soc. Tactics	.27	6.04^{***}	.18	3.93^{***}	.27	5.76^{***}	.23	5.14^{***}	.18	3.94^{***}
Total R^2		$.198^{***}$		$.122^{***}$		$.126^{***}$		$.18^{***}$		$.121^{***}$
Change in R^2		$.063^{***}$		$.029^{***}$		$.063^{***}$		$.047^{***}$		$.029^{***}$

Notes. Block 3 model displayed. Block 1 includes controls, block 2 includes intern goal orientations. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Table 5-11: Time 2 Feedback Seeking Regressed on Socialization Tactics

	Feedback seeking (Supervisor)		(Other experts)	
Variable	β	$t(463)$	β	$t(463)$
Socialization Tactics	.42	9.61^{***}	$.34^{***}$	7.76^{***}
Total R^2		$.237^{***}$		$.202^{***}$
Change in R^2		$.152^{***}$		$.104^{***}$

Notes. Block 3 model displayed. Block 1 includes controls, block 2 includes intern goal orientations. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Interns who experienced socialization tactics may have interpreted their training as a signal their employer might consider offering them a regular fulltime job (Baron & Krups, 1999). If so, these interns may have been more motivated to increase their chance of getting an offer by

making positive impressions on their supervisor. To test this possibility, performance impression management was regressed on socialization tactics in block 3. Table 5-9 shows socialization tactics were positively related to performance impression management.

5.3.4 Hypotheses 7 and 8 Results

Hypotheses 7 and 8 focused on the mediating role of self-regulation activities. Hierarchical multivariate multiple regression was used to assess mediation (Kenny et al., 1998), and a one-tailed Sobel test was used to assess the significance of the indirect effect of each predictor variable on each dependent variable (Sobel, 1982). Mediation analysis involves confirming four conditions are met (Kenny et al., 1998): 1) the predictors (goal orientations and socialization tactics) are related to the dependent variables (learning and performance); 2) the predictors are related to the mediators (self-regulation activities); 3) the mediators are related to the dependent variables when controlling for the predictors; 4) the predictors have no effect (full mediation) or a diminished effect (partial mediation) on the dependent variables in the third condition. Conditions 1 and 2 were tested with the preceding hypotheses. To test the last two conditions, each dependent variable was regressed on the controls and predictor variables (block 1), followed by self-regulation activities (block 2). For mediation to occur, the mediator(s) should be significant in block 2, and the main effects of the predictor(s) should disappear or be significantly diminished. Table 5-12 displays standardized coefficients (β) to highlight the significant relationships between predictors and mediators (cf. Tables 5-6, 5-7 and 5-9). Table 5-13 shows standardized coefficients for the dependent variables regressed on the mediators (without the predictors in the model).

Predictors that were unrelated to mediators or outcomes were pruned from each mediation model. For example, because only company LGO, supervisor PGO, and socialization tactics were related to both company learning and career networking, they were the only predictors included in the model displayed in Table 5-14a. To be consistent with the prior hypothesis tests, two sets of mediation models were run that included: 1) worker and supervisor goal orientations as predictors (Tables 5-14a,15a,16a) and 2) worker goal orientations and socialization tactics as predictors (Tables 5-14b,15b,16b).

Table 5-12: Standardized Betas (β) for Mediators Regressed on Predictors

	Mediators (t3)				
Predictors	Career networking	Learning strategies	Fdbk. seeking (supervisor)	Fdbk. seeking (other)	Perf. impr. mgmt.
Company LGO (t1)	.15***	.04	.03	.04	.10*
Competency LGO (t1)	.05	.13**	.06	.07	.05
Competitive PGO (t1)	.04	.00	.11*	.13**	.14**
Supv. LGO (t3)	.11+	.33***	.18***	.09	.14*
Supv. PGO (t3)	.16**	.08	.26***	.17***	.19***
Soc. Tact. (t2)	.15***	.15***	.15***	.15***	.15***

Notes. $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$. Standardized coefficients excerpted from Tables 5-6, 5-7 and 5-9.

Table 5-13: Standardized Betas (β) for Dependent Variables Regressed on Mediators

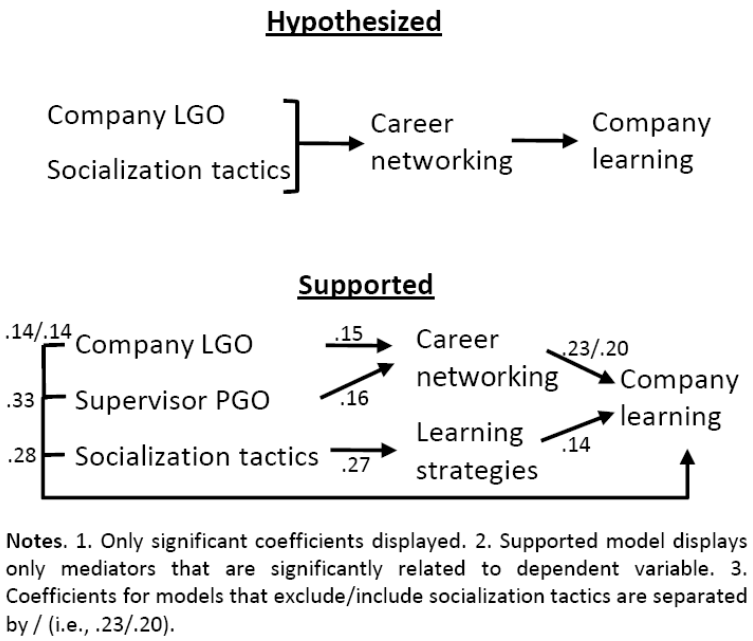
Mediators	DV: Company learning	DV: Competency learning	DV: Performance
Career networking	.28***	.09+	.03
Learning strategies	.17***	.46***	.01
Fdbk. seeking (supv.)	.06	.09+	.13*
Fdbk. seeking (others)	-.05	.14**	.05
Perf. impr. mgmt.	.07	.08+	.22***

Notes. Block 2 model Standardized coefficients displayed. Block 1 includes controls. $t(460)$, $^{+}p < .10$. $^{*}p < .01$. $^{**}p < .01$. $^{***}p < .001$.

Hypotheses 7a and 8a predicted career networking would mediate the relationship of both company LGO (7a), and socialization tactics (8a) to company learning. Figure 5-2 shows predicted and supported relationships for both hypotheses. Supervisor PGO was included in the Table 5-14a mediation analysis because it was positively related to both company learning and career networking. Feedback seeking and performance impression management was included because supervisor PGO also was related to these mediators. As Table 5-14a shows, career

networking was positively related to company learning in block 3 of the hierarchical model, and the relationship of company LGO to company learning was weaker in block 1. Sobel tests supported mediation indicating career networking partially mediates the relationship of company LGO to company learning (2.46, $p < .01$), and the relationship of supervisor PGO to company learning (2.18, $p < .05$). Table 5-14b shows the mediation analysis that included

Figure 5-2: Hypothesized and Supported Relationships for H7a and H8a



Notes. 1. Only significant coefficients displayed. 2. Supported model displays only mediators that are significantly related to dependent variable. 3. Coefficients for models that exclude/include socialization tactics are separated by / (i.e., .23/.20).

Table 5-14a: Mediation Analysis for Worker and Supervisor Goal Orientations Using Hierarchical Regression (DV: Company Learning)

Variable	R^2 in Model	Change in R^2 Block	β	*t*(465)
Block 2	.227***			
Company LGO			.18	4.14***
Supervisor PGO			.38	8.73***
Block 3	.272***	.045***		*t*(461)
Company LGO (t1)			.14	3.31**
Supervisor PGO (t3)			.33	7.12***
Career networking (t3)			.23	4.36***
Feedback seeking (supervisor) (t3)			-.03	-.45
Feedback seeking (other experts) (t3)			-.01	-.24
Performance impression management (t3)			.05	1.01

Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

socialization tactics. Learning strategies, feedback seeking, and performance impression management were included as potential mediators in this model because socialization tactics were positively related to all three. With the mediators included in the model, company LGO and socialization tactics have weaker relationships to company learning. Career networking and learning strategies also are significantly related to company learning.

Table 5-14b: Mediation Analysis for Worker Goal Orientation and Socialization Tactics Using Hierarchical Regression (DV: Company Learning)

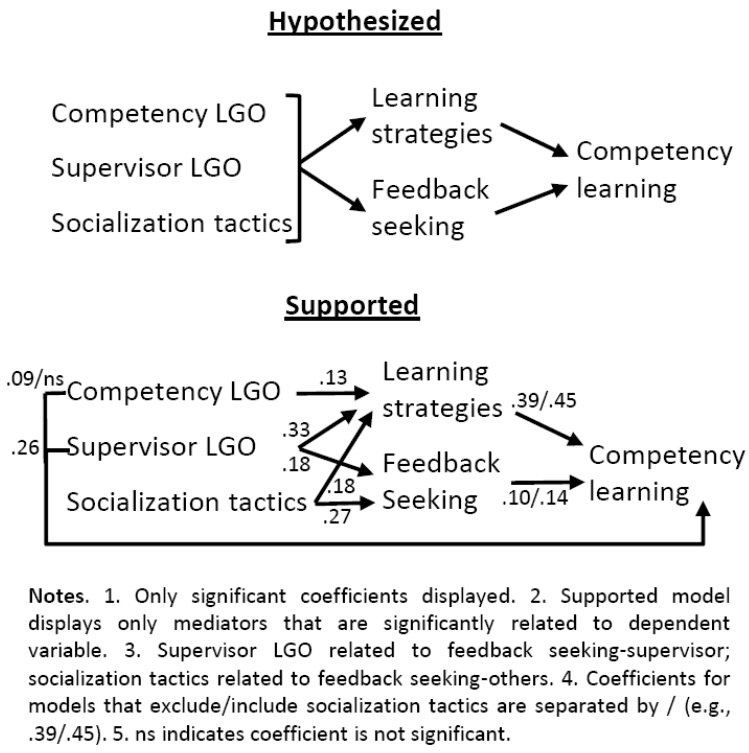
Variable	R^2 in Model	Change in R^2 Block	β	*t*(465)
Block 1	.218***			
Company LGO			.18	4.11***
Socialization tactics			.36	8.34***
Block 2	.275***	.057***		*t*(460)
Company LGO (t1)			.14	3.30***
Socialization tactics (t2)			.29	6.30***
Career networking (t3)			.20	3.81***
Feedback seeking (supervisor) (t3)			.02	0.30
Feedback seeking (other experts) (t3)			-.05	-0.82
Learning strategies (t3)			.14	3.18**
Performance impression management (t3)			.06	1.17

Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

For the model displayed in Table 5-14b, Sobel tests also supported mediation for the relationship of company LGO to company learning (2.26, $p < .05$), and for the relationship of socialization tactics to company learning (career networking, 3.19, $p < .001$; learning strategies: 2.47, $p < .01$). Thus, hypotheses 7a and 8a were only weakly supported for partial mediation. One explanation for the unexpected relationship between learning strategies and company learning is that workers who used learning strategies may have been more actively engaged in seeking out organizational knowledge that was useful in helping them perform their jobs.

Hypothesis 7b predicted the relationships of competency and supervisor LGO to competency learning will be mediated by feedback seeking and learning strategies. Alternative hypothesis 8b predicted feedback seeking and learning strategies also would mediate the relationship of socialization tactics to competency learning. Figure 5-3 shows the hypothesized and supported relationships. Table 5-15a shows mediation analysis results for competency and

Figure 5-3: Hypothesized and Supported Relationships for H7b and Alternative H8b



Notes. 1. Only significant coefficients displayed. 2. Supported model displays only mediators that are significantly related to dependent variable. 3. Supervisor LGO related to feedback seeking-supervisor; socialization tactics related to feedback seeking-others. 4. Coefficients for models that exclude/include socialization tactics are separated by / (e.g., .39/.45). 5. ns indicates coefficient is not significant.

supervisor LGO, and Table 5-15b shows results for competency LGO and socialization tactics. Competency LGO was not related to feedback seeking, so only learning strategies could be tested as a mediator for competency LGO. Performance impression management was included in both models because supervisor LGO and socialization tactics were related to both competency learning and performance impression management. Tables 5-15a and 5-15b show feedback seeking and learning strategies were positively related to competency learning. Table 5-15a shows the effects of competency and supervisor LGO on competency learning were weaker in

Table 5-15a: Mediation Analysis for Worker and Supervisor Goal Orientations Using Hierarchical Regression (DV: Competency Learning)

Variable	R^2 in Model	Change in R^2 Block	β	*t*(465)
Block 2	.294***			
Competency LGO			.15	3.77***
Supervisor LGO			.47	11.63***
Block 3	.443***	.149***		*t*(462)
Competency LGO (t1)			.09	2.41*
Supervisor LGO (t3)			.26	6.48***
Feedback seeking (supervisor) (t3)			.10	2.24*
Learning strategies (t3)			.39	9.69***
Performance impression management (t3)			.09	1.92+

Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

the block 3 model. Sobel tests indicate learning strategies mediates the relationships of both competency LGO (2.79, $p < .001$) and supervisor LGO (4.98, $p < .001$) to competency learning, and feedback seeking (targeting supervisors) mediates the relationship of supervisor LGO to competency learning (1.84, $p < .05$).

Table 5-15b: Mediation Analysis for Worker Goal Orientation and Socialization Tactics Using Hierarchical Regression (DV: Competency Learning)

Variable	R^2 in Model	Change in R^2 Block	β	*t*(465)
Block 2	.116***			
Competency LGO			.17	3.86***
Socialization tactics			.18	3.83***
Block 3	.417***	.301***		*t*(460)
Competency LGO (t1)			.07	1.87+
Socialization tactics (t2)			.00	0.20
Career information seeking (t3)			.09	1.82+
Feedback seeking (supervisor) (t3)			.09	1.71+
Feedback seeking (other experts) (t3)			.14	2.70**
Learning strategies (t3)			.45	11.44***
Performance impression management (t3)			.08	1.66+

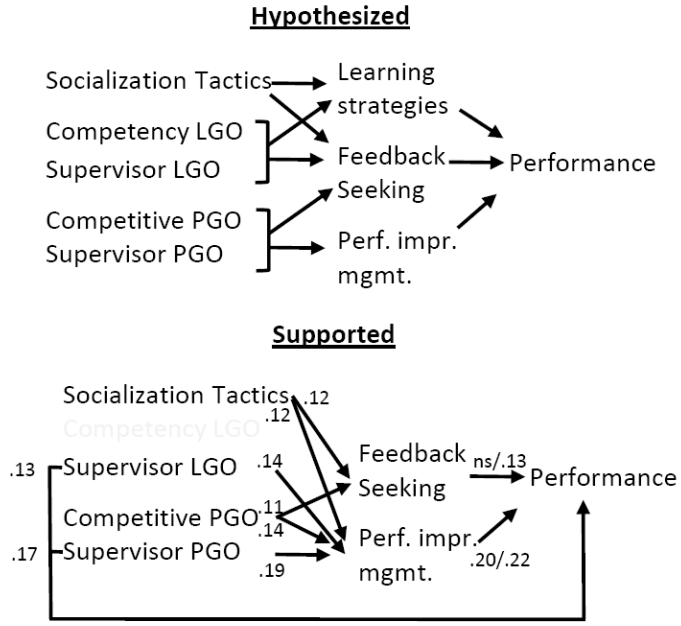
Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 5-15b shows the effects of competency LGO and socialization tactics on competency learning disappeared in the block 3 model. Sobel tests again supported mediation for

competency LGO (2.82, $p < .01$) and socialization tactics (learning strategies: 3.71, $p < .001$; feedback seeking-others: 2.39, $p < .01$). These results indicate learning strategies mediate the relationship of competency LGO to competency learning, and partly mediate the relationship of supervisor LGO to competency learning. Learning strategies and feedback seeking (targeting other experts) mediate the relationship of socialization tactics to competency learning.

Hypotheses 7b also predicted learning strategies and feedback seeking would mediate the relationships between competency and supervisor LGO and performance, and alternative hypothesis 7c predicted the relationship of PGO to performance would be mediated by performance impression management and feedback seeking. Hypothesis 8b predicted learning strategies, feedback seeking and performance impression management would mediate the relationship between socialization tactics and performance. Figure 5-4 shows the predicted and supported models. Table 5-16a shows mediation analysis results for competitive and supervisor PGO, and Table 5-16b shows results for competitive PGO and socialization tactics. Competency LGO was pruned from both models as it was unrelated to performance. All of the self-regulation activities were included in both mediation analyses because at least one predictor variable was related to both performance, and to each self-regulation activity. As Table 5-16a shows, the relationships between the two supervisor goal orientations and performance were weaker in the block 3 model than the block 2 model, and the relationship was no longer significant for competitive PGO. However, performance impression management was the only mediator positively related to performance. Sobel tests indicated this variable mediated the relationships of competitive PGO (2.26, $p < .05$) and supervisor PGO (2.42, $p < .01$) and LGO (2.06, $p < .05$) to performance. This indicates performance impression management mediates the

Figure 5-4: Hypothesized and Supported Relationships for H7b,c and H8b



Notes. 1. Only significant coefficients displayed. 2. Supported model displays only mediators that are significantly related to dependent variable. 3. Only feedback seeking-supervisor is positively related to performance in the model which includes socialization tactics. 4. Coefficients for models that exclude/include socialization tactics are separated by / (e.g., .20/.22). 5. ns indicates coefficient is not significant.

Table 5-16a: Mediation Analysis for Worker and Supervisor Goal Orientations Using Hierarchical Regression (DV: Performance)

Variable	R^2 in Model	Change in R^2 Block	β	*t*(464)
Block 2	.157***	.118***		
Competitive PGO			.09	2.07*
Supervisor LGO			.15	2.60**
Supervisor PGO			.23	3.74***
Block 3	.213***	.055***		*t*(459)
Competitive PGO (t1)			.05	1.09
Supervisor LGO (t3)			.13	2.13*
Supervisor PGO (t3)			.17	2.80**
Career information seeking (t3)			.01	0.13
Feedback seeking (supervisor) (t3)			.05	0.87
Feedback seeking (others) (t3)			.06	0.93
Performance impression management (t3)			.20	3.70***
Learning strategies (t3)			-.06	-1.31

Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

relationship of competitive PGO to performance, and partly mediates the relationships of supervisor LGO and PGO to performance.

Table 5-16b displays the model that included competitive PGO and socialization tactics as predictors. In this model, only performance impression management and feedback seeking

Table 5-16b: Mediation Analysis for Worker Goal Orientation and Socialization Tactics Using Hierarchical Regression (DV: Performance)

Variable	R^2 in Model	Change in R^2 Block	β	*t*(458)
Block 1	.063***	.024***		
Supervisor PGO			.11	2.45*
Socialization tactics			.12	2.46***
Block 2	.165***	.101***		
Supervisor PGO (t1)			.05	1.09
Socialization tactics (t2)			.02	0.48
Career information seeking (t3)			.03	0.52
Feedback seeking (supervisor) (t3)			.13	2.13*
Feedback seeking (others) (t3)			.04	0.61
Performance impression management (t3)			.22	3.87***
Learning strategies (t3)			.01	0.24

Notes. Block 1 includes control variables. $^{+}p < .10$. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

targeting supervisors were related to performance. The coefficients for competitive PGO and socialization tactics were insignificant in the block 3 model, supporting mediation. Sobels tests also supported mediation for competitive PGO (feedback seeking- supervisor: 1.61, $p = .05$; performance impression management: 2.39, $p < .01$), and socialization tactics (feedback seeking-supervisor: 1.99, $p < .05$; performance impression management: 2.69, $p < .01$). Thus, feedback seeking (targeting supervisors) and performance impression management mediate the relationship of both competitive PGO and socialization tactics to performance. Overall, these results mostly support hypotheses 7b and 8b, and alternative hypothesis 7c.

5.4 Results Summary

Eight hypotheses were tested using hierarchical multivariate multiple regression. Tables 5-17 and 5-18 summarize results. As expected, each goal orientation predicted different kinds of self-regulation activities and outcomes. For example, company LGO predicted interns' career networking and learning about their employers. Competency LGO predicted their use of learning strategies and skill development. **Table 5-17: Hypothesis Results Summary (H1-6)**

Hyp.	Description	Support?
H1a	Company LGO related to company learning	Yes
H1b	Competency LGO related to competency learning, performance	Yes for competency learning No for performance
H1c	Competitive PGO related to performance	Weak (without competency LGO in model)
H2a	Supervisor LGO related to competency learning, perf.	Yes
H2b	Supervisor PGO related to performance	Yes
H3a	Competitive PGO X supervisor LGO interaction positively affects competency learning, performance	Weakly supported for competency learning, not performance
H3b	Competency LGO X supervisor PGO interaction negatively affects competency learning, performance	No
H4	Socialization tactics related to learning and performance	Yes
H4 alt	Socialization tactics related to only learning	No
H5a	Company LGO related to career networking	Yes
H5b	Competency and supervisor LGO related to learning strategies, feedback seeking	Yes for learning strategies Yes for feedback seeking (supervisor LGO) No for feedback seeking (competency LGO)
H5c	Competitive and supervisor PGO related to perf. imp. mgt.	No
H5c alt	Competitive and supervisor PGO related to perf. imp. mgt., feedback seeking	Yes
H6	Socialization tactics related to career networking, learning strategies, feedback seeking, perf. imp. mgt.	Yes

Alternative hypotheses were supported for PGO, though not for socialization tactics. PGO was found to have a positive relationship to feedback seeking, a result that differs from most prior research (Payne et al., 2007). Additional support for the rationale behind this

hypothesis was found in a post hoc moderation analysis: short-term workers who viewed themselves as the most competent were more likely to seek feedback from supervisors, while those who viewed themselves as less competent were less likely to seek such feedback. The alternative hypothesis that socialization tactics would only be related to learning, and not to performance, was not supported. The main rationale for this in a short-term job was that socialization tactics for short-term workers sends a signal that the employer may want to offer the highest performers regular, fulltime jobs (Baron & Krups, 1999). This may have motivated them to perform well.

Table 5-18: Hypothesis Results Summary for Mediation Analysis (H7-8)

Hyp.	Predictor	Hypothesized Mediator(s)	Outcome (s)	Mediation Support?	Sobel Test Support?
H7a	Company LGO	Career networking	Company learning	Partial	Yes
H7b	Competency LGO	Feedback seeking, learning strat.	Competency learning	Full (lrng. strat. only)	Yes
			Performance	None	---
	Supv. LGO	Feedback seeking, learning strat.	Competency learning	Partial	Yes
			Performance	Partial	Yes
H7c alt	Comp. PGO	Feedback seeking, perf. imp. mgt.	Performance	Full	Yes
	Supv. PGO	Feedback seeking, perf. imp. mgt.	Performance	Partial (perf. imp. mgt. only)	Yes
H8a	Soc. tactics	Career networking	Company learning	Partial (incl. lrng. strat.)	Yes
H8b	Soc. tactics	Feedback seeking, learning strat;	Competency learning	Full	Yes
		Feedback seeking, learning strat., perf. imp. mgt.	Performance	Full	Yes

Notes. 1. alt = alternative hypotheses. 2. For H7b, only feedback seeking targeting supervisors was related to competency learning. 3. For H7c alt, only feedback seeking targeting supervisors was related to performance with competitive PGO and socialization tactics as predictors. 4. For H8b, only feedback seeking targeting other experts was related to competency learning.

Table 5-18 shows mediation analysis results were mostly supported for competency LGO, competitive PGO, and socialization tactics. In most cases, partial mediation was supported. Performance impression management played an unexpected mediating role in the relationship between socialization tactics and performance. The results also suggest feedback from other experts was more helpful in boosting learning, while supervisor feedback was more helpful in boosting performance.

Chapter 6: Discussion and Conclusions

6.1 Overview

This chapter reviews the key results of the hypothesis tests, addresses potential alternative explanations and summarizes the contributions of the study to both organizational research and practice.

6.2 Key findings, alternative explanations and study limitations

This study tested a theoretical model in which achievement goals and socialization tactics explained how workers with little experience and substantial responsibilities can both learn and perform in short-term jobs. Several key findings in this study contribute to the literature on achievement goals, and the tensions between learning and performance—particularly in a new, short-term job.

This study found support for an untested assumption in the achievement goal literature that goal orientations may be domain-specific (Dweck & Legett, 1988; Elliot, 2005). Company LGO and competency LGO were different kinds of learning goal orientations that predicted different activities and outcomes. Short-term workers with a company LGO focused on learning about a potential employer. Those with a competency LGO focused on developing skills in their jobs.

Regarding results that are specific to short-term workers, this study found no support for a widely held view that performance goals are maladaptive (e.g., Brophy, 2005; Kozlowski & Bell, 2006). Competitive PGO motivated several adaptive activities and outcomes. Support was found for an alternative hypothesis that PGO will predict feedback seeking behavior because in a

short-term job the benefits of improving performance outweigh the costs of appearing less competent. This differs from prior findings that show PGO is unrelated or negatively related to feedback seeking behavior (Payne et al., 2007; VandeWalle & Cumings, 1997). Short-term workers with a competitive PGO also were motivated to ensure their supervisors were aware of their performance achievements. Competency LGO did not motivate this activity. This is not an activity that one would usually associate with a person's first 8-12 weeks in a job. When a job is only 8-12 weeks long, however, this activity can ensure performance accomplishments are recognized. Competitive PGO was even positively related to short-term workers' learning about a potential employer. Presumably, their motivation to perform well in order to get a job offer may have also motivated them learn about regular fulltime job opportunities in the organization. These findings support an alternative view that performance goals may provide an adaptive boost in motivation in a short-term setting (Elliot & Church, 1997). For the short-term workers in this study, LGO and PGO served complementary, not conflicting functions.

Though most hypotheses were supported in this study, a number of alternatives that could explain the results need to be explored. First, organizational characteristics may have helped short-term workers learn or perform more effectively in their jobs. For example, some employers may have offered more challenging work or had more highly skilled staff, or may have had more experience mentoring or training short-term workers. These characteristics could have provided workers with more opportunities to learn and develop their skills. This alternative explanation is accounted for in two ways. First, employers were relatively similar within each industry, and employer industry effects were controlled for in this study. Consulting firms or financial services firms offer similar types of internship experiences. Industry effects explained 2.1% of the variance in company learning (change in $F(4,471)= 2.56$, $p < .05$) and 1.9% of the variance in

performance (change in $F(4,471)= 2.05$, $p < .10$), but no variance in competency learning. Second, socialization tactics account for organizational characteristics such as whether supervisors and colleagues were supportive, and whether or not short-term workers experienced structured training and mentoring in their jobs. These tactics did have effects on learning and performance independent of goal orientations. This means the effects of goal orientations on learning and performance were independent of effects accounted for by industry differences or socialization practices.

Other factors concerning the relationship of short-term workers to their supervisors or colleagues also may have affected their learning and performance outcomes. Two possibilities are considered here. First, supervisors may have provided workers with informal performance feedback. Informal feedback initiated by supervisors would have given workers information they could have used to learn and perform their jobs more effectively. To test this explanation, participants were asked at time 3 if their primary supervisor gave them informal performance feedback (0=no feedback, 1=feedback at midpoint or end, 2=feedback at both midpoint and end). This variable was added in a third step to each of the 9 main effect models used to test hypotheses 1,2 and 4. For 5 of the 9 models, informal feedback was positively related to learning and performance. However, these effects did not change any of the previously reported results.

A second possibility is some short-term workers had more positive interpersonal experiences with their supervisors or colleagues. These positive experiences may have led workers to experience halo effects, and to report more positive learning and performance outcomes. For example, short-term workers who liked their supervisors and colleagues may have felt more positive in general when their jobs were over. Their positive feelings may have resulted in positive learning and performance ratings. It was possible to test this alternative using a 2 item

scale (α=.78) that assessed work relationship satisfaction (Baard, Deci & Ryan, 2004). An example item is "I really liked the people I worked with" (1=strongly disagree to 5=strongly agree). To test if relationship satisfaction was related to learning and performance, this variable was added in a third step to the 9 main effect models used to test hypotheses 1,2 and 4. The variable was significantly related to learning and performance in each model, and impacted hypothesis 4 results. Specifically, socialization tactics had a weaker relationship to competency learning (β=.08 (*t*,468) = 1.79, *p*=.075, 95% confidence interval for Beta of -.009 to .18), and were no longer related to performance disappeared. It also is possible that socialization tactics helped workers have more positive relational experiences. These experiences may have provided better access to organizational knowledge and expertise, which would have positively affected their learning and performance. A mediation analysis supported this interpretation. Socialization tactics explained 8.9% of the variance in relationship satisfaction (Change in *F*=49.91, $p < .001$, β=.32, (*t*,469) = 6.85, $p < .001$), and as noted, socialization tactics were not significantly related to learning and performance disappeared with relationship satisfaction included in the model. Still, hypothesis 4 results should be interpreted with caution. Future research can further investigate how socialization tactics may affect the quality of newcomers' relationships, and how such relationship quality influences their learning and performance.

Factors associated with short-term workers' task assignment also may have affected their learning or performance. To account for this, task collaboration was controlled for in each of the models. Workers whose job assignments required more collaboration with others reported more learning, but not higher performance. Another task factor that could have affected participants' learning and performance is their job autonomy (Hackman & Oldham, 1975). For example, workers with more opportunity to define their own work responsibilities may have learned more

in their jobs because they could focus on activities that contributed to their learning. Those who exercised initiative to define their own roles also may have been viewed as higher performers. To test this possibility, a three item task autonomy scale (Hackman & Oldham, 1975)(α=.85) measured at time 2 was added as a third step to the 9 main effect models. Task autonomy predicted variance in learning and performance in 7 of the 9 models. The results reported in chapter 5, however, were unchanged.

In addition to organizational, supervisory and task factors, other individual factors may have affected participants' learning and performance. Two alternatives are considered here. First, it is possible that those with less prior work experience reported a larger positive change in their skills because their baseline competency levels were lower than those with more prior work experience. That is, they may have learned more simply because they had more to learn. This implies there could have been a negative relationship between prior experience and learning. Conversely, those with more work experience may have performed their jobs more effectively because they were more experienced (Quinones et al., 1995). Participant demographic data collected at time 2 included three prior experience variables (in years): 1) general work experience; 2) work experience in the employer's industry; and 3) work experience in the participant's job function. To test for effects of prior experience on learning and performance, the three experience variables were added as a third step to the 9 main effect models (hypotheses 1,2 and 4). Including experience in the models did not change any of the previously reported results. General experience had no effects, and the other two experience variables had no effects on performance. Industry experience was negatively related to company learning, and functional experience was negatively related to competency learning. This indicates prior experience in the

same industry was associated with less learning about one's employer, and prior experience in the same job function with less skill development.

A final individual factor to consider that might account for the results in this study is possible changes in goal orientations (Deshon & Gillespie, 2005; Fryer & Elliot, 2007). Since goal orientations were measured just before people started their jobs, people could have changed or revised their goals later. Their revised goal orientations may have influenced their activities and outcomes. For example, performance-oriented workers may have realized how important it was for them to learn skills after they started their jobs, and become more learning-oriented as a result. Alternatively, learning-oriented workers may have become more performance-oriented after they started their jobs and began competing with others for fulltime job offers. If this were true, it would explain why alternative hypothesis 5c was supported (PGO positively related to feedback seeking), and why learning goals were not related to feedback seeking. That is, workers who were the most learning-oriented before starting their jobs were more performance-oriented after starting their jobs, and vice versa. Since goal orientation scales were administered only at time 1 to minimize participant fatigue, test-retest reliability could not be calculated for these scales. However, single item goal orientation measures in time 1 and 2 surveys asked participants to allocate a fixed number of points to statements representing their learning and performance goal preferences. The stability of these single item goal orientation measures can be evaluated by their test-retest reliability, and by testing for significant differences between their time 1 and 2 mean scores. For test-retest reliability, the competitive PGO items for times 1 and 2 were significantly correlated ($r = .30$, $p < .001$), as were the time 1 and 2 items for competency LGO ($r = .30$, $p < .001$) and company LGO ($r = .44$, $p < .001$) (all two-tailed tests). These results support the stability of each goal orientation from time 1 to 2. A paired samples t-test indicated

the competency LGO score did not change significantly (t=1.26, p=.21) (time 1: M=23.6, S=12.6; time 2: M=24.6, S=14.4). The competitive PGO score, however, decreased significantly (t=6.81, $p < .001$) (time 1: M=17.7, S=12.9; time 2: M=12.8, S=12.5), and the company LGO score increased significantly (t=5.79, $p < .001$) (time 1: M=21.8, S=12.7; time 2: M=25.6, S=13.5). These results indicate competency LGO was the most stable goal orientation from time 1 to 2. It also could indicate participants who were performance-oriented at time 1 may have adopted stronger company learning goals at time 2. That is, performance-oriented interns' were more motivated to learn about their employers after starting their jobs. This shift towards a company LGO for performance-oriented interns is consistent with the fact that performance goals had some similar effects as company learning goals. For example, competitive PGO was positively related to company learning. This suggests similarities in the effects of competitive PGO and company LGO may be due to a shift from the former to the later after people started their jobs. Because the single item goal measures required respondents to allocate a fixed amount of points across several goals, the shift towards company learning goals at time 2 does not indicate performance goals were weaker at time 2 than at time 1. It just means interns were more willing at time 2 to tradeoff their performance goals (rather than competency learning goals) for company learning goals. Overall, participants' goal orientations appear to have been relatively stable from time 1 to time 2. These unexpected similarities between competitive PGO and company LGO, however, should be explored further in future research. Are the similarities an artifact of shifting goal preference from time 1 to time 2? Alternatively, did both orientations have a common antecedent: motivation to obtain a fulltime job offer?

This study had several limitations due to reliance on self-reported measures, and mediators that were measured at the same time as outcomes. Self-report measures could be

vulnerable to common methods variance. As chapter 4 reported, the CFA showed neither a single factor model nor a model with a latent common method factor fit the data, indicating common methods variance was not an issue with the data in this study (Podsakoff et al., 2003). The model with the predicted number of factors did fit the data well, supporting the validity of the measurement model. Self-report also provided the most accurate assessment method for most of the constructs operationalized in this study. For example, participants are in the best position to assess their own goals. They also should know the extent to which they engaged in self-regulation activities such as learning strategies. Self-report measures also may be vulnerable to halo effects in which positive feelings about the job may be reported as generally positive outcomes. The possibility of halo effects was tested with the prior analysis of positive relationship experiences, which had minimal effects on the hypothesized outcomes.

Two self-report measures that may have been improved with more independent measures are performance and supervisor goal orientations. Objective performance measures (e.g., supervisor ratings) could not be obtained for this study because career services directors consented to include their schools in the study under the condition that performance reviews would not be requested of intern employers. As chapter 4 reported, the performance scale in this study was validated by whether participants received a fulltime job offer at the end of their internships. Receiving a fulltime job offer is an objective indicator of how well short-term workers may have performed their jobs.

Further assessment of the validity of the supervisor LGO and PGO measures was possible since these scales were included as part of the supervisor survey. So for a smaller sample of participants (n=65), supervisor and intern responses to the same scales could be compared for their effects on learning and performance. The supervisor survey measures had

acceptable reliability for both LGO (α=.83) and PGO (α=.85) scales. Both sets of measures were significantly correlated for supervisor LGO (r=.29 p=.02), though not for supervisor PGO (r=.20, p=.11) (two-tailed tests). The two main effect models used to test hypothesis 2 were rerun with both competency learning and performance regressed on the supervisor measures. Supervisor PGO was unrelated to learning or performance. Supervisor LGO was marginally related to competency learning (β=.24, t(63)=1.67, p =.10; 95% confidence interval for Beta of -.035 to .385), and unrelated to performance. The lack of significant effects for the supervisor measures may have been due to low statistical power from the small sample size. Nonetheless, these results suggest the support for hypotheses concerning supervisor goal orientations should be interpreted with caution. Future research should test the same relationships using measures collected from supervisors.

A final limitation of this study was that both mediator and outcome variables were measured at time 3. Prior socialization research has shown studies using cross-sectional data show stronger effects than studies using longitudinal data (Bauer et al., 2007). The use of time 3 mediator and outcome measures therefore may have inflated some of the relationships between these variables. To address this issue, most of the hypothesis tests relied on longitudinal data with 6-12 weeks or more between responses. For example, the main effect hypotheses for worker goal orientation tested the relationships of each time 1 goal orientation to time 3 outcomes that were measured 12-15 weeks later. Furthermore, feedback seeking was measured at both time 2 and 3. Duplicate analyses with time 2 and 3 feedback seeking yielded the same results. This provides some evidence that relationships between mediators and outcomes were not simply due to both sets of variables being measured at time 3.

6.3 Study contributions and implications for management research and practice

6.3.1 Contributions to research on short-term worker learning and performance

This study contributes to the goal orientation and socialization literatures on the topic of how workers can both learn and perform in a short amount of time. This study challenges a widely held view in the goal orientation literature that only learning goals are adaptive (e.g., Brophy, 2005; Kozlowski & Bell, 2006). This view was not supported for short-term workers. Instead, performance goals motivated adaptive self-regulation activities including feedback seeking and performance impression management, which in turn were related to performance. Performance-oriented workers also learned more about their employers, and were more likely to develop skills when they had learning-oriented supervisors. Competency LGO, on the other hand, was unrelated to performance. Instead, it motivated a different set of self-regulation activities including learning strategies and feedback seeking (time 2 only), which in turn were related to skill development. Thus for short-term workers, both LGO and PGO motivated self-regulation activities that were adaptive (Elliot & Church, 1997). Future research should examine why learning goals have less of an effect on performance in short-term jobs. For example, short-term performance deadlines may cause workers to experience higher levels of stress and negative affect (e.g., Kozlowski & Bell, 2006). These conditions may impede workers's efforts to translate their learning into performance gains (e.g., Kanfer & Ackerman, 1989). Alternatively, learning-oriented workers may expend effort and attention on acquiring skills that are both central and peripheral to task performance. This could have accounted for the null relationship between learning goals and performance (Elliot & Church, 1997).

This study contributes to research on goal orientations and feedback seeking by showing PGO was positively related to this behavior for short-term workers. This was consistently found

for both time 2 and 3 feedback seeking that targeted both supervisors and other experts, and contrasts with most prior research (Payne et al., 2007). Only a few studies show positive relationships between PGO and feedback seeking (Park et al., 2007; Porath & Bateman, 2006; Tuckey et al., 2002). Performance-oriented workers appeared to be less focused on the costs of appearing incompetent (VandeWalle & Cummings, 1997; Morrison, 1993a,b) and more focused on the benefits of performing well in a short amount of time. A post-hoc analysis supported this explanation by showing workers with lower self-perceived competence were less likely to seek feedback than those with higher self-perceived competence. Future research should continue to measure these cost-benefit moderating factors directly. Time also may be an important moderating factor. For example, performance-oriented workers may be more likely to seek feedback as a performance evaluation becomes imminent. Learning-oriented workers may be less likely to seek feedback under the same circumstances since they will have less time to incorporate the feedback into skill development activities.

This study contributes to research on the use of socialization tactics for short-term workers as the first longitudinal investigation socialization tactics and short-term worker learning and performance. In contrast to prior research with undergraduate interns (Gruman et al., 2006), this study found socialization tactics were positively related to performance. Socialization tactics conventionally are used to help newcomers learn and adapt to permanent fulltime work roles (Bauer et al., 1998; Saks & Ashforth, 1997a). This study showed socialization tactics can also be effective at helping short-term workers learn about fulltime employment opportunities in their organizations. In fact, socialization tactics explained more variance in company learning than in competency learning or performance. Since the relationship of socialization tactics to company learning was only partially mediated by career networking, future research should explore other

mediating mechanisms for this relationship. For example, do content, context and social aspects tactics positively affect company learning through different mechanisms?

This study also makes a broad contribution to organizational research by shedding light on a relatively unexplored topic: how professional workers in novel settings with substantial responsibilities can both learn and perform in a short-term amount of time. Much research has been done on marginalized forms of short-term employment such as temporary or contingent workers (for a review, see Ashford et al., 2008). Only recently have the implications of short-term professional work begun to be explored as an opportunity for worker skill development and upward mobility (e.g., Barley & Kunda, 2005; Inkson, Heising & Rousseau, 2001; O'Mahony & Bechky, 2006). The kinds of short-term jobs investigated in this study are rarely studied and represent a new research frontier that is interesting for both theory development and management practice. Several key features of such short-term work should be considered for theory development and future research. Such features include the length of the role, the extent to which a worker identifies with the role, and the extent to which the employer views the role as a strategic resource. For example, short-term workers may expect their roles to last a few weeks or months, or 1-2 years. Some short-term jobs may have the potential to transition into regular fulltime jobs (Baron & Kreps, 1999), while others may only be temporary (Barley & Kunda, 2004). Some short-term workers may view their roles as integral to their personal and professional identity, while others may view their roles merely as a source of income (Ashforth, 2001; Hall & Chandler, 2005). Some short-term roles may require skills that are peripheral to the firm's strategic capabilities, while others require skills that are a central to the firm's capabilities (Matsuk & Hill, 1998). Variations in these features may influence the resources that workers, groups and organizations allocate in order to achieve learning and performance outcomes. For

example, some workers may be motivated to learn skills they view as strategic to the firm because they identify with their role. Other workers may be motivated to learn the same skills because mainly for their own economic advantage.

6.3.2 Contributions to research on newcomer learning and performance

This study also contributes more generally to our understanding of how achievement goals and socialization tactics influence newcomer learning and performance. First, this study found support for a previously untested assumption that people who are learning-oriented in one domain will not necessarily be learning-oriented in a different domain (Dweck & Legett,1988; Elliot, 2005). For example, company and competency LGO were weakly correlated (r=.09) and predicted different kinds of self-regulation activities and learning outcomes. Company LGO predicted if workers would learn about their employers, but did not predict their skill development. On the other hand, a competency LGO predicted their skill development, but not if they would learn about their employers. Future research should investigate whether people also have distinct learning goals focused on different kinds of skills. For example, people may have different learning goals focused on technical competence and interpersonal skills.

Another possible area to explore in future research is the relationship of different goal orientations to workers' expectations for their employment relationships. This study showed workers had distinctly learning goals focused on acquiring employer knowledge and skill development. Workers with a company LGO may expect implicit commitments for future employment. Workers with a competency LGO may expect implicit commitments for skill development and challenging work assignments. On the other hand, those with a PGO may expect their jobs to be more tenuous, and their work environments to be more competitive. Such

differences in expectations may affect the kinds of psychological contracts short-term workers try to negotiate with their employers (Rousseau, 2005).

Prior research has shown learning goals are associated with intrinsic motivation, and performance goals with extrinsic motivation (e.g., Elliot & Harackiewicz, 1996; Lee et al., 2003). In work settings, however, people are surrounded by a variety of intrinsic and extrinsic motivators (e.g., Gagne & Deci, 2005). For example, people may have adopted a company LGO for extrinsic reasons (e.g., getting a job offer) or intrinsic reasons (e.g., assessing their fit with the employers' values). Alternatively, people may have adopted a competency LGO for extrinsic reasons (e.g., developing skills in order to earn a higher salary) or intrinsic reasons (e.g., self-improvement). Given that people are more likely to persist, learn and thrive when they are intrinsically motivated (Gagne & Deci, 2005; Ryan & Deci, 2000), it would be interesting to explore whether the linkage between LGO and learning is weaker for those who were more extrinsically motivated, and stronger for those who were more intrinsically motivated.

This is the first field study to show subordinate and supervisor goal orientations had both independent and interdependent effects on subordinate learning and performance. Prior research has shown experimenter instructions (e.g., Barron & Harackiewicz, 2001; Kozlowski & Bell, 2006), teacher goal orientations (e.g., Ames, 1992; Self-Brown & Matthews, 2003), group goal orientations (e.g., Bunderson & Sutcliffe, 2003; Kristoff-Brown & Stevens, 2001), and supervisor attributes (e.g., supportive supervision; VandeWalle et al., 2000) can influence people's attitudes, behaviors and outcomes. This study showed supervisor LGO predicted both competency learning and performance, and supervisor PGO predicted performance, independent of the effects of subordinates' own goal orientations. Future research should explore the different mechanisms by which each supervisor goal orientation influences performance. For example,

learning-oriented supervisors may provide subordinates with organizational resources that help them perform better as a consequence of learning (e.g., mentoring, training). Performance-oriented supervisors may simply motivate subordinates to allocate more attention and effort to meeting performance standards. As indirect support of this possibility, a post hoc mediation analysis indicated learning mediated the relationship of supervisor LGO to performance. When competency and company learning were added to the hypothesis 2 model (cf. Table 5-4), they explained 5% of the variance in performance (competency learning: β=.22, $t(458)$=4.32, p < .001; company learning: β=.13, $t(458)$=2.77, p < .001), and the effect of supervisor LGO on performance disappeared (β=.03, $t(458)$=.53). In the same model, supervisor PGO was still related to performance (β=.18, $t(458)$=2.98, p < .01). This suggests supervisor LGO and PGO influenced performance through different mechanisms.

This study also contributes to the socialization tactics literature in several ways. Prior socialization studies have investigated individual differences such as big five traits (Wanberg & Kammeyer-Mueller, 2000) or desire for control (Ashford & Black, 1996) as antecedents to newcomer socialization. This study introduces goal orientations as another individual characteristic that affects newcomer activities and outcomes. Goal orientations and socialization tactics explained unique variance in both self-regulation activities, and learning and performance outcomes. This is also one of the few studies to investigate the relationship of socialization tactics to newcomer proactive behaviors (Kim et al., 2005; Gruman et al., 2006). The self-regulation activities in this study were comparable to what the socialization literature calls newcomer proactive tactics (Bauer et al., 2007). This study showed that socialization tactics encouraged newcomers to be more proactive, which in turn influenced their learning and performance.

The socialization literature recently has emphasized the importance of viewing socialization as a learning process (e.g. Ashforth et al., 2007; Bauer et al., 2007; Klein et al., 2006). This study contributes to this literature by exploring the different mechanisms by which socialization tactics were related to both competency learning and company learning. Though feedback seeking and learning strategies mediated the former relationship as expected, career networking only partly mediated the latter relationship. Future research should explore other mechanisms by which socialization tactics may help newcomers acquire employer knowledge.

6.3.3 Contributions to management practice

This study makes a number of contributions that are important for short-term professional workers and their employers. Workers should be aware of their own goal orientations when entering short-term jobs, and supervisors should be aware of their goal orientations when managing short-term subordinates. This study shows both subordinate and supervisor goal orientations make a difference in what people learn, and how well they perform. Subordinates experienced more positive outcomes by adopting learning and performance goals of their own initiative. Subordinates benefited more, however, when their supervisors were learning-oriented than performance-oriented since the former were positively associated with both learning and performance, while the latter were associated only with performance. Employers should ensure supervisors are trained to encourage their subordinates to adopt their own learning and performance goals, while focusing the supervisors' own behaviors on support for learning. Employers also should recognize that socialization tactics appear to play a different role for short-term workers than for regular fulltime workers. While socialization tactics help fulltime employees learn and perform in their roles, the main purpose they appear to serve for short-term

workers is to help them learn what a regular fulltime job might be like in the organization. For short-term workers, socialization tactics appear to be less likely to contribute to their skill development and performance.

The findings of this study also generalize to a variety of organizational settings. Over 30,000 MBA students complete internships each year in the U.S. alone (Association to Advance Collegiate Schools of Business, 2008), and MBA internships are becoming more common in other international MBA programs. Other short-term workers in similar jobs include interns enrolled in professional degree programs (e.g., law, engineering), and potentially upper division undergraduate interns. This study should apply to a variety of jobs as those who participated worked for over 300 employers in a variety of industries and job functions. The findings of this study also may generalize to other professional roles in which people engage in a series of short-term work assignments (e.g., consultants; management development programs) where outcomes on each assignment may influence their subsequent success in the organization.

6.4 Conclusions

Drawing mainly from the achievement goal and socialization literatures, I developed a theoretical model to explain how learning and performance occurs in short-term jobs in which people lack prior experience yet have substantial responsibilities. The model was tested with a sample of 475 MBA intern from 10 schools. Support was found for most of the hypotheses. Workers who adopted multiple goal orientations, who had learning-oriented supervisors, and who experienced socialization tactics, had the most positive learning and performance outcomes. Company LGO motivated workers to initiate career networking activities inside their organizations, and helped them learn about their employers. Competency LGO motivated them

to use learning strategies and seek feedback when they were about halfway through their jobs. These activities helped them develop skills in their jobs. Competitive PGO motivated them to consistently seek feedback and ensure their supervisors were aware of their accomplishments. These activities helped them perform better. Supervisors viewed as having an LGO positively affected workers' learning and performance, and even helped performance-oriented workers learn more. Supervisors viewed as having a PGO positively affected workers' performance, but also may have impaired learning for some workers.

This study adds to the achievement goal literature by distinguishing two types of LGO and showing they each predicted different activities and outcomes. It also shows that for short-term workers, performance goals can serve an adaptive function. This study adds to the socialization literature by showing worker goal orientations are an important individual factor that can influence newcomer learning and performance. It also fills a gap in socialization research on short-term workers who lack prior experience yet have substantial responsibilities. Short-term workers and their employers can benefit from the findings of this study by aligning their goal orientations and socialization practices with their desired outcomes.

Bibliography

Ames, C. (1992). Achievement goals and the classroom motivational climate. In D.H. Schunk & J.L. Meeced (Eds.) ***Student perceptions in the classroom*** (pp.327-348) Hillsdale, NJ: Erlbaum.

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. ***Journal of Educational Psychology***, 80, 260-267.

Anderson, J.R. (2000). ***Learning and memory: An integrated approach***. New York: Wiley.

Arthur, W. Jr., Bennett, W. Jr., Edens, RS., & Bell, S.T. (2003). Effectiveness of training in organizations: a meta-analysis of design and evaluation features. ***Journal of Applied Psychology***, 88, 234-245.

Ashford, S.J., & Black, J.S. (1996). Proactivity during organizational entry: The role of desire for control. ***Journal of Applied Psychology***, 81, 199-214.

Ashford, S.J., George, E., & Blatt, R. (2008). Old assumptions, new work: The opportunities and challenges of research on nonstandard employment. In J.P. Walsh and A.P. Brief (Eds.), ***Academy of Management Annals***, *Vol. 1*, forthcoming. Mahwah, NJ: Lawrence Erlbaum.

Ashford, S.J., Blatt, R., & VandeWalle, D. (2003). Reflections on the looking glass: A review of research on feedback-seeking behavior in organizations. ***Journal of Management***, 29, 773-799.

Ashford, S.J., & Tsui, A.S. (1991). Self-regulation for managerial effectiveness: The role of active feedback seeking. ***Academy of Management Journal***, 34, 251-280.

Ashforth, B.E. (2001). ***Role transitions in organizational life: An identity-based perspective***. Mahwah, NJ: Lawrence Erlbaum Associates.

Ashforth, B.E., & Saks, A.M. (1996). Socialization tactics: Longitudinal effects on newcomer adjustment. ***Academy of Management Journal***, 39, 149-178.

Ashforth, B.E., Sluss, D. M., & Saks, A.M. (2007). Socialization Tatics, Proactive Behavior, and Newcomer Learning: Integrating Socialization Models. ***Journal of Vocational Behavior***, 70, 447-462.

Association for the Advancement of Collegiate Schools of Business (2008). ***AACSB Guide to Business Education.*** https://www.aacsb.edu/knowledgeservices/home/reports.asp.

Baard, P. P., Deci, E. L., Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. ***Journal of Applied Social Psychology***, 34, 2045-2068.

Barley, S., & Kunda, G. (2004). ***Gurus, Hired Guns and Warm Bodies: Itinerant Experts in a Knowledge Economy***. Princeton, NJ: Princeton University Press.

Baron, J.N., & Kreps, D.M. (1999)***. Strategic Human Resources: Frameworks for General Managers***. New York: John Wiley & Sons.

Bateman, T., & Crant, M. (1993). The proactive component of organizational behavior: A measure and correlates. ***Journal of Organizational Behavior***, 14, 103-118.

Barron, K.E., & Harackiewicz, J.M. (2001). Achievement goals and optimal motivation: Testing multiple goal models. ***Journal of Personality and Social Psychology***, 80, 706-722.

Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. ***Journal of Applied Psychology***, *92*, 707-721.

Bauer, T. N., & Green, S. G. (1998). Testing the combined effects of newcomer information seeking and managerial behavior on socialization. ***Journal of Applied Psychology***, *83*, 72-83.

Bauer, T.N., Morrison, E.W., & Callister, R.R. (1998). Organizational socialization: A review and directions for future research. In Ferris, G.R. (Ed.), ***Research in Personnel and Human Resources Management***, 16, 149-214. Elsevier Science/JAI Press.

Beckhy, B.A., & O'Mahony, S. (2006). Stretchwork: Managing the career progression paradox in external labor markets. ***Academy of Management Journal***, 49, 918-941.

Beenen, G. (2007). Learning fast: Understanding MBA internship effectiveness. ***Best Paper Proceedings of the Academy of Management***.

Beenen, G. (2008). Do I really want to work here: Pre-entry person-organization fit, career learning, and MBA job acceptance intentions. ***Working Paper***.

Boswell, W.R., Boudreau, J.W., & Dunford, B.B. (2004). The outcomes and correlates of job search objectives: Searching to leave or searching for leverage. ***Journal of Applied Psychology***, 89, 1083-1091.

Brophy, J. (2005). Goal theorists should move on from performance goals. ***Educational Psychologist,*** 40, 167-176.

Broschak, J.P., & Davis-Blake, A. (2006). Mixing Standard Work and Nonstandard Deals: The Consequences of Heterogeneity in Employment Relationships. ***Academy of Management Journal***, 49, 371-393.

Bunderson, J.S. & Sutcliffe, K.A. (2003). Management team learning orientation and business unit performance. ***Journal of Applied Psychology***, 88, 552-560.

Butler, R. (1993). Effects of task and ego-achievement goals on information seeking during task engagement. ***Journal of Personality and Social Psychology***, 65, 18-31.

Button, S.B., Matheiu, J.E., & Zajac, D.M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. ***Organizational Behavior and Human Decision Processes***, 67, 26-48.

Callister, R.R., Kramer, M.W., & Turban, D.B., (1999)**.** Feedback seeking following career transitions. ***Academy of Management Journal,*** 42, 429-438.

Chan, D., & Schmitt, N. (2000). Interindividual differences in intraindividual changes in proactivity during organizational entry: A latent growth modeling approach to understanding newcomer adaptation. ***Journal of Applied Psychology***, 85, 190-210.

Chao, G.T., O'Leary-Kelly, A.M., Wolf, S., Klein, H.J., & Gardner, P.D. (1994). Organizational socialization: Its contents and consequences. ***Journal of Applied Psychology***, 79, 730-743.

Church, M.A., Elliot, A.J., & Gable, S.L. (2001). Perceptions of classroom environment, achievement goals, and achievement outcomes. ***Journal of Educational Psychology***, 93, 43-54.

Coco, M. (2000). Internships: A try before you buy arrangement, ***SAM Advanced Management Journal***, 65, 41-44.

Cohen, J. (1995). The earth is round ($p < .05$). ***American Psychologist***, 49, 997-1003.

Cohen, J., Cohen, P., West, S.G. & Aiken, L.S. (2003). ***Applied multiple regression/correlation analysis for the behavioral sciences*** (Third Edition). Mahwah, NJ: Erlbaum.

Colquitt, J.A., LePine, J.A., & Noe, R.A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. ***Journal of Applied Psychology***, 85, 678-707.

Cook, S.J., Parker, R.S., & Pettijohn, C.E. (2004). The perceptions of interns: A longitudinal study. ***Journal of Education for Business***, 79, 179-187.

Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and application. ***Journal of Applied Psychology***, 78: 98-104.

Crant, J.M. (2000). Proactive behavior in organizations. ***Journal of Management***, 26, 435-462.

Cury, F., Elliot, A.J., Da Fonseca, D., & Moller, A.C. (2006). The social-cognitive model of achievement motivation and the 2 X 2 achievement goal framework. ***Journal of Personality and Social Psycholog***y, 90, 666-679.

Day, E., Yeo S., & Radosevich, D.J. (2003). Comparing two- and thre-factor models of goal orientation: A meta-analysis. ***Paper presented at the 18th Annual Society for Industrial and Organizational Psychology Convention, Orlando, FL.***

Deshon, R.P., & Gillespie, J.Z. (2005). A motivated action theory account of goal orientation. ***Journal of Applied Psychology***, 90, 1096-1127.

Dorman, T., Boshuizen, H., King, N., & Scherpbeier, A. (2007). Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. ***Medical Education***, 41, 84-91.

Dragoni, L. (2005). Understanding the emergence of state goal orientation in organizational work groups: The role of leadership and multi-level climate perceptions. ***Journal of Applied Psychology***, 90, 1084-1095.

Durbin, J., & Watson, G.S. (1950). Testing for serial correlation in least squares regression. ***Biometrika***, 37, 409-428.

Dweck, C.S. (1986). Motivational processes affecting learning. ***American Psychologist***, 41, 1040-1048

Dweck, C.S., & Legett, E.L. (1988). A social-cognitive approach to motivation and personality, ***Psychological Review***, 95, 256-273.

Edwards, J.R., & Bagozzi, R.P. (2000). On the nature and direction of relationships between constructs and measures. ***Psychological Methods***, 5, 155-174.

Elliot, C.S. (2005). A conceptual history of the achievement goal construct. In A.J. Elliot & C.S. Dweck (Eds.), (pp527-547) ***Handbook of Competence and Motivation,*** New York: Guillford Press.

Elliot, C.S. & Church, M.A. (1997). A hierarchical model of approach and avoidance achievement motivation. ***Journal of Personality and Social Psychology***, 72, 218-232.

Elliot, E.S., & Dweck, C.S. (1988). Goals: An approach to motivation and achievement. ***Journal of personality and Social Psychology***, 54, 5-12.

Elliot, E.S., & Harackiewicz, J.M. (1996). Approach and avoidance goals and intrinsic motivation: A mediational analysis. ***Journal of personality and Social Psychology***, 70, 461-475.

Elliot, E.S. & McGregor, H.A. (2001). A 2 X 2 achievement goal framework. ***Journal of personality and Social Psychology***, 80, 501-519.

Elliot, A.J., McGregor, H.A., & Gable, S.L. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. ***Journal of Educational Psychology***, 91, 549-563.

Elliot, A.J., Shell, M.M., Henry, K., & Maier, M. (2005). Achievement goals, performance contingencies, and performance attainment: An experimental test. ***Journal of Educational Psychology***, 97, 630-640.

Elliot, A. J., & Thrash, T.M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. ***Journal of Personality and Social Psychology***, 82, 804-818.

Eyler, J. (1996). Graduates assessment of the impact of a full-time college internship on their personal and professional lives. ***College Student Journal***, 29, 188-194.

Feldman, D.C., Folks, W.R., & Turnley, W.H. (1999). Mentor-protégé diversity and its impact on international internship experiences. ***Journal of Organizational Behavior***, 20, 597-611.

Feldman, D.C., Folks, W.R., & Turnley, W.H. (1998). The socialization of expatriate interns. ***Journal of Managerial Issues***, 10, 403-418.

Feldman, D.C., & Weitz, B.A. ((1990). Summer interns: Factors contributing to positive developmental experiences. ***Journal of Vocational Behavior***, 37, 267-284.

Ford, J. K., Smith, E. M., Weissbein, D. A., Gully, S. M., & Salas, E. (1998. Relationships of goal orientation, metacognitive activity, and practice strategies with learning outcomes and transfer. ***Journal of Applied Psychology***, 83, 218-233.

Fryer, J. W., & Elliot, A.J. (2007). Self-regulation of achievement goal pursuit. In D. Schunk & B. Zimmerman (Eds.), ***Motivation and Self-Regulated Learning: Theory, Research, and Applications*** (pp. 53-76). Hillsdale, NJ: Lawrence Erlbaum Associates.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. ***Journal of Organizational Behavior***, 26, 331-362.

Gersick, C. J. G. (1989). Marking time: Predictable transitions in task group. ***Academy of Management Journal***, 32, 274-309.

Godshalk, V.M., & Sosik, J.J. (2003). Aiming for success: The role of learning goal orientation in mentoring relationships. ***Journal of Vocational Behavior***, 63, 417-437.

Graduate Management Admissions Council (2005). ***MBA.com Registrants Survey: (2005)-(2006).*** http://www.gmac.com/gmac/researchandtrends/

Graduate Management Admissions Council (2006a). ***Corporate Recruiters Survey.*** http://www.gmac.com/gmac/researchandtrends/.

Graduate Management Admissions Council (2006b). ***Corporate Recruiters Survey (2006) General Data Report.*** http://www.gmac.com/gmac/researchandtrends/.

Graduate Management Admissions Council (2006c). ***Global MBA Graduate Survey.*** http://www.gmac.com/gmac/researchandtrends/.

Grant, H., & Dweck, C. (2003). Clarifying achievement goals and their impact. ***Journal of Personality and Social Psychology***, 85, 541-553.

Gruman, J.A., Saks, A.M., & Zweig, D.I. (2006). Organizational socialization tactics and newcomer proactive behaviors: An integrative study. ***Journal of Vocational Behavior***, 69, 90-104.

Hackman, J.R., & Oldham, G.R. (1975). Development of the job diagnostic survey. ***Journal of Applied Psychology***, 60, 159-170.

Hall, D.T., & Chandler, D.E. (2005). Psychological success: When the career is a calling. ***Journal of Organizational Behavior***, 26, 155-176.

Harackiewicz, J. M., Barron, K. E., & Elliot, A. J. (1998). Rethinking achievement goals: When are they adaptive for college students and why? ***Educational Psychologist***, 33, 1-21.

Harackiewicz, J.M., Pintrich, P.R., Barron, K.E., Elliot, A.J., & Thrash, T.M. (2002). Revision of achievement goal theory: Necessary and illuminating. ***Journal of Educational Psychology***, 94, 638-645.

Henderson, A., Miller, D., & Hambrick, D.C. (2006). How quickly do CEOs become obsolete? Industry dynamism, CEO tenure and company performance. ***Strategic Management Journal***, 27, 447-460.

Hill, L. (2003). ***On Becoming a Manager***. Cambridge: Harvard Business School Press.

Hoff, T.J., Pohl, H., & Barfield, J. (2006). Teaching but not learning: How medical residency programs handle errors. ***Journal of Organizational Behavior***, 27, 869-896.

Ilgen, D.R., & Hollenbeck, J.R. (1992). The structure of work: Job design and roles. In M.D. Dunnette & L.M. Hough (eds.). ***Handbook of Industrial and Organizational Psychology,*** vol. 2 (2nd ed.), 165-207, Palo Alto, CA: Consulting Psychologists Press.

Inkson, K., Heising, A. & Rousseau, D.M. (2001). The interim manager: Prototype of the 21st century worker? ***Human Relations***, 54, 259-281.

Janssen, O., & Prins, J.T. (2007). Goal orientations and the seeking of different types of feedback information. ***Journal of Occupational and Organizational Psychology,*** 80, 235-249**.**

Jones, G.R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. ***Academy of Management Journal***, 29, 262-279.

Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. & Rosenthal, R.A. (1964). ***Organizational Stress: Studies in Role Conflict and Ambiguity***. New York: John Wiley & Sons.

Kammeyer-Meuller, J.D., & Wanberg, C.R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. ***Journal of Applied Psychology***, 88, 779-794.

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M.D. Dunnette & L.M. Hough (eds.). ***Handbook of Industrial and Organizational Psychology,*** vol. 1 (2nd ed.), 75-170, Palo Alto, CA: Consulting Psychologists Press.

Kanfer, R., & Ackerman, P.L. (1989). Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. ***Journal of Applied Psychology***, 74, 657-690.

Karabenick, S. A. (2003). Seeking help in large college classes: A person-centered approach. ***Contemporary Educational Psychology***, 28, 37-58.

Karoly, P. (1993). Mechanisms of self-regulation: A systems view. ***Annual Review of Psychology***, 44, 23-52.

Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), ***The handbook of social psychology*** (Vol. 1, 4th ed., pp. 233-265). Boston, MA: McGraw-Hill.

Kim, T.Y., Cable, D.M., & Kim, S.P. (2005). Socialization tactics, employee proactivity, and person-organization fit. ***Journal of Applied Psychology***, 90, 232-241.

King, L.A., & King, D.W. (1990). Role conflict and role ambiguity: A critical assessment of construct validity. ***Psychological Bulletin,*** 107, 48-64

Klein, H.J., Fan, J., & Preacher, K.J. (2006). The effects of early socialization experiences on content mastery and outcomes: A mediational approach. ***Journal of Vocational Behavior***, 68, 96-115.

Kohli, A., Shervani, T., Challagalla, G. (1998), Learning and performance orientation of salespeople: the role of supervisors. ***Journal of Marketing Research***, 35, 263-74.

Kozlowski, S.W., Bell, B.S. (2006). Disentangling achievement orientation and goal setting effects on self-regulatory processes. ***Journal of Applied Psychology***, 91, 900-916.

Kozlowski, S.W., Gully, S.M., Brown, K.G., Salas, E., Smith, E.M., & Nason, E.R. (2001). Effects of training goals and goal orientation on multidimensional training outcomes and performance adaptability. ***Organizational Behavior and Human Decision Processes***, 85, 1-31.

Kristoff-Brown. A., & Stevens, C. (2001). Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter? ***Journal of Applied Psychology***, 86, 1083-1095.

Lee, F., Sheldon, K.M., & Turban, D.E. (2003). Personality and the goal-striving process: The influence of achievement goal patterns, goal level, and mental focus on performance and enjoyment. ***Journal of Applied Psychology***, 88, 256-265.

Levenson, A.R., Van der Stede, W.A., & Cohen, S.G. (2006). Measuring the relationship between managerial competencies and performance. ***Journal of Management***, 32, 360-380.

Lewin, K. (1936). ***Principles of topological psychology***. New York: McGraw-Hill.

Lieberman, D.A. & Remedios, R. (2007). Do Undergraduates' Motives for Studying Change as they Progress through their Degrees? ***British Journal of Educational Psychology,*** 77, 379-395.

Linnenbrink, E.A. (2005). The dilmena of performance-approach goals: The use of multiple goal contexts to promote students' motivation and learning. ***Journal of Educational Psychology***, 97, 197-213.

Locke, E.A., & Latham, G.P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. ***American Psychologist***, 57, 705-717.

Lopez, D.F. (1999). Social cognitive influences on self-regulated learning: The impact of action-control beliefs and academic goals on achievement-related outcomes. ***Learning and Individual Differences***, 11, 301-319.

March, J. (1991). Exploration and exploitation in organizational learning. ***Organization Science***, 2, 71-92.

Martocchio, J.J. (1994). Effects of conceptions of ability on anxiety, self-efficacy and learning in training. ***Journal of Applied Psychology***, 79, 819-825.

Matsuk, S.F., & Hill, C.W.L. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. ***Academy of Management Review***, 23, 680-697.

McGregor, H.A., & Elliot, A.J. (2002). Achievement goals as predictors of achievement-relevant processes prior to task engagement. ***Journal of Educational Psychology***, 94, 381-395.

McLelland, G.H. and Judd, C.M. (1993). Statistical difficulties in detecting interactions and moderator effects. ***Psychological Bulletin***, 114, 376.

Meece J. (1994). The role of motivation in self-regulated learning., In D. H. Schunk & B. J. Zimmerman (Eds.), ***Self-regulation of Learning and Performance*** (pp. 25-44). Hillsdale, NJ: Erlbaum.

Middleton, M., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An under-explored aspect of goal theory. ***Journal of Educational Psychology***, 89, 710-718.

Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? ***Journal of Educational Psychology***, 93, 77-86.

Migerney, J.T., Rubin, R.B., & Gorden, W.I. (1995). Organizational entry: An investigation of newcomer communication behavior and uncertainty. ***Communication Research***, 22, 54-85.

Moore, D.A. (2007). Not so above average after all: When people believe they are worse than average and its implications for theories of bias in social comparison. ***Organizational Behavior and Human Decision Processes***, 102, 42-58.

Morrison, E.W. (1993a). Newcomer information seeking: Exploring types, modes, sources and outcomes. ***Academy of Management Journal***, 36, 557-589.

Morrison, E.W. (1993b). Longitudinal study of the effect of information seeking on newcomer socialization. ***Journal of Applied Psychology***, 78, 173-183.

Morrison, E.W. (2002a). Newcomer's relationships: The role of social network ties during socialization. ***Academy of Management Journal***, 45, 1149-1160.

Morrison, E.W. (2002b). Information seeking within organizations. ***Human Communication Research***, 28, 229-243.

Narayanan, V.K., Olk, P., & Fukami, C. (2006). Determinants of internship effectiveness: An exploratory model. ***Unpublished paper presented at the 2006 Academy of Management Meeting***, Atlanta, GA.

Ng, T.W.H., Butts, M.M., Vandenberg, R.J., Dejoy, D.M., & Wilson, M.G. (2006). Effects of management communication, opportunity for learning, and work schedule flexibility on organizational commitment, ***Journal of Vocational Behavior***, 68, 474-89.

Ng, T., Eby, L. T., Sorensen, K., & Feldman, D. (2005). Predictors of objective and subjective career success: A meta-analysis. ***Personnel Psychology***, 58, 367-408.

O'Mahony, S., & Bechky, B.A. (2006). Stretchwork: Managing the career progression paradox in external labor markets. ***Academy of Management Journal***, 49, 918-941.

Ostroff, C., & Kozlowski, S.W.J. (1992). Organizational socialization as a learning process: The role of information acquisition. ***Personnel Psychology,*** 45, 849-874.

Park, G., Schmidt, A. M., Scheu, C. R., & DeShon, R. P. (2007) Process Model of Feedback Seeking. ***Human Performance***, 20, 119-145.

Payne, S.C., Youngcourt, S.S., & Beaubien, J.M. (2007). A meta-analytic examination of the goal orientation nomological net. ***Journal of Applied Psychology***, 92, 128-150.

Peterson, R.A. (1994). A meta-analysis of Cronbach's coefficient alpha. ***The Journal of Consumer Research***, 21, 381-391.

Pintrich, P. R., Smith, D. A., Garcia, T., & McKeachie, W. J. (1993). Reliability and predictive validity of the Motivated Strategies for Learning Questionnaire (MSLQ). ***Educational and Psychological Measurement***, 53, 801-813

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y. & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. ***Journal of Applied Psychology***, 88, 879-903.

Porath, C.L., & Bateman, T.S. (2006). Self-regulation: From goal orientation to job performance. ***Journal of Applied Psychology***, 91, 185-192.

Quinones, M.A., Ford, K.J. & & Teachout, M.S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. ***Personnel Psychology***, 48, 887-911.

Raudenbush, S.W., & Bryk, A.S. (2002). ***Hierarchical linear models: Applications and data analysis methods***. Thousand Oaks, CA: Sage.

Rawsthorne, L.J., & Elliot, A.J. (1999. Achievement goals and intrinsic motivation: A meta-analytic review. ***Personality and Social Psychology Review***, 3, 326-344.

Reagans, R., Argote, L., & Brooks, D. (2005). Individual experience and experience working together: Predicting learning rates from knowing what to do and knowing who knows what. ***Management Science***, 51, 869-881.

Reichers, A.E. (1987). An interactionist perspective on newcomer socialization rates. ***Academy of Management Review***, 12, 278-287.

Rollag, K. (2004). The Impact of Relative Tenure on Newcomer Socialization Dynamics. ***Journal of Organizational Behavior,*** 25, 853-872.

Rollag, K., Parise, S., & Cross, R. (2005). **Getting New Hires Up to Speed Quickly**. ***MIT/Sloan Management Review***, Winter Issue, 35-44.

Rousseau, D.R. (1995). ***Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements.*** Newbury Park, CA: Sage.

Rousseau, D.R. (2005). ***I-deals: Idiosyncratic Deals Employees Bargain for Themselves.*** Armonk, NY: M.E. Sharpe.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. ***American Psychologist***, 55, 68-78.

Saks, A.M., & Ashforth, B.E. (1997a). Organizational socialization: Making sense of the past and present as a prologue for the future. ***Journal of Vocational Behavior***, 51, 234-279.

Saks, A.M., Ashforth, B.E. (1997b). Socialization tactics and newcomer information acquisition. ***International Journal of Selection and Assessment***, 5, 48-61.

Salas, E., & Canon-Bowers, J.A. (2001). The science of training: A decade of progress, ***Annual Review of Psychology***, 52, 471–499.

Sawyer, J.E. (1992). Goal and process clarity: Specification of multiple constructs of role ambiguity and a structural equation model of their antecedents and consequences. ***Journal of Applied Psychology,*** 77, 130-142.

Schneider, B. (1987). The People Make the Place. ***Personnel Psychology***, 40, 437-452.

Seijts, G.H., & Latham, G.P. (2005). Learning versus performance goals: When should each be used? ***Academy of Management Executive***, 19, 124-131.

Seijts, G., Latham, G.P., Tasa, K., & Latham, B.W. (2004). Goal setting and goal orientation: An integration of two different yet related literatures. ***Academy of Management Journal***, 47, 227-239.

Self-Brown, Shannon R. Matthews, II, Samuel. (2003). Effects of classroom structure on student Achievement goal orientation. ***Journal of Educational Research***, 97, 1-9.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), ***Sociological Methodology 1982*** (pp. 290-312). Washington DC: American Sociological Association.

Sudman, S., Bradburn, N., & Schwarz, N. (1996). ***Thinking about answers: The application of cognitive processes to survey methodology***. San Francisco, CA: Jossey-Bass.

Taylor, M.S. (1988). Effects of college internships on individual participants. ***Journal of Applied Psychology,*** 73, 393-492.

Taylor, M. S., Fisher, C. D., Ilgen, D. R. (1984) Individual's reactions to performance feedback in organizations: A control theory perspective. In K. M. Rowland C. D. Ferris (Eds.), ***Research in personnel and human resources management*** (Vol. 2, pp. 81-124). Greenwich, CT: JAI Press.

Tuckey, M., Brewer, N. & Williamson, P. (2002). The influence of motives and goal orientation on feedback seeking, ***Journal of Occupational and Organizational Psychology***, 75, 195-216.

U.S. Department of Labor, (2008). Bureau of Labor Statistics News. Released June 27, (2008). Bureau of Labor Statistics website: http://www.bls.gov/news.release/pdf/nlsoy.pdf.

U.S. News and World Report (2007; 2008). Best Graduate Schools: Top Business Schools http://grad schools.usnews.rankingsandreviews.com/grad/mba.

Van Der Vegt G., Emans B., & Van De Vliert E. (2000). Team members' affective responses to patterns of intragroup interdependence and job complexity. ***Journal of Management***, 26, 633-655.

Van Maanen J., & Schein, E. (1979). Toward a theory of organizational socialization. In B.M. Staw (Ed.), ***Research in Organizational Behavior*** , vol. 1: 209-264, Greenwich, CT: JAI Press.

VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. ***Educational and Psychological Measurement***, 57, 995-1015.

VandeWalle, D. (2003). A goal orientation model of feedback seeking behavior. ***Human Resource Management Review***, 13, 581-604.

VandeWalle, D., Brown, S.P., Cron, W.L., & Slocum, J.W. (1999). The influence of goal orientation and self-regulation tactics on sales performance: A longitudinal field test. ***Journal of Applied Psychology***, 85, 249-259.

VandeWalle, D., Challagalla, G.N., Ganesan, S., & Brown, S.P. (2000). An integrated model of feedback-seeking behavior: Disposition, context and cognition. ***Journal of Applied Psychology***, 85, 996-1003.

VandeWalle, D., Cron W.L., & Slocum, J.W. Jr. (2001). The role of goal orientation following performance feedback. ***Journal of Applied Psychology***, 86, 629-640.

VandeWalle, D., & Cummings, L.L. (1997). A test of the influence of goal orientation on the feedback-seeking process. ***Journal of Applied Psychology***, 82, 390-400.

Van Iyperen, N.W. (2006). A novel approach to assessing achievement goals in the context of the 2 X 2 framework: Identifying distinct profiles of individuals with different dominant achievement goals. ***Personality and Social Psychology Bulletin***, 32, 1432-1445.

Wanberg, C.R. & Kammeyer-Mueller, J.D. (2000). Predictors and outcomes of proactivity in the socialization process. ***Journal of Applied Psychology***, 85, 373-385.

Wang, M., & Takeuchi, R. (2007). The role of goal orientation during expatriation: A cross-sectional and longitudinal investigation. ***Journal of Applied Psychology***, 92, 1437-1445.

Weiss, H.M. (1990). Learning theory and Industrial-Organizational psychology. In M.D. Dunnette & L.M. Hough (eds.). ***Handbook of Industrial and Organizational Psychology,*** vol. 1 (2nd ed.), 172-173, Palo Alto, CA: Consulting Psychologists Press.

Wolters, C.A. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition and achievement. ***Journal of Educational Psychology***, 96, 236-250.

Yukl, G. & Falbe, C. (1991). Importance of different power sources in downward and lateral relations. ***Journal of Applied Psychology***, 76, 416-423.

Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. ***Journal of Applied Psychology***, 92, 745-756.

APPENDIX A: Means, Standard Deviations, Correlation Coefficients and Reliability Coefficients of Study Variables (1 of 3)

			M	*S*	1	2	3	4	5	6	7	8	9
Predictors	**1**	Competency LGO (t1)	*5.86*	*0.92*	*(.64)*								
(1-6)	**2**	Company LGO (t1)	*5.99*	*0.76*	0.08	*(.78)*							
	3	Competitive PGO (t1)	*5.10*	*1.32*	0.23	0.16	*(.85)*						
	4	Supervisor LGO (t3)	*4.15*	*1.07*	0.04	0.07	0.03	*(.84)*					
	5	Supervisor PGO (t3)	*4.54*	*1.03*	-0.02	0.10	0.09	0.64	*(.90)*				
	6	Socialization tactics (t2)	*3.57*	*0.80*	-0.02	0.13	0.01	0.38	0.44	*(.89)*			
DVs	**7**	Competency learning (t3)	*4.43*	*0.82*	0.16	0.10	0.08	0.48	0.35	0.21	---		
(7-9)	**8**	Company learning (t3)	*5.71*	*0.93*	0.05	0.21	0.10	0.36	0.40	0.41	0.26	*(.85)*	
	9	Performance (t3)	*5.57*	*0.82*	0.09	0.05	0.14	0.31	0.29	0.10	0.34	0.26	*(.85)*
Mediators	**10**	Career networking (t3)	*4.28*	*1.06*	0.11	0.17	0.07	0.23	0.26	0.31	0.35	0.34	0.19
(10-16)	**11**	Feedback seeking (supv.) (t3)	*4.20*	*1.10*	0.09	0.11	0.15	0.36	0.39	0.29	0.36	0.24	0.25
	12	Feedback seeking (oth.) (t3)	*3.65*	*1.15*	0.12	0.09	0.17	0.26	0.28	0.27	0.43	0.22	0.23
	13	Feedback seeking (supv.)(t2)	*4.17*	*1.08*	0.11	0.09	0.15	0.33	0.35	0.43	0.28	0.29	0.24
	14	Feedback seeking (others)(t2)	*3.59*	*1.19*	0.12	0.08	0.15	0.24	0.25	0.38	0.32	0.18	0.12
	15	Perf. impr. management (t3)	*4.20*	*1.00*	0.10	0.14	0.19	0.29	0.33	0.21	0.35	0.25	0.31
	16	Learning strategies (t3)	*4.23*	*0.92*	0.13	0.06	0.07	0.39	0.32	0.23	0.54	0.25	0.12
Controls	**17**	Task collaboration (t2)	*4.93*	*0.93*	0.01	0.13	0.04	0.16	0.25	0.24	0.17	0.20	0.05
(17-25)	**18**	School1 (y=1)	*22%*	---	0.02	0.12	-0.02	0.04	0.01	0.05	-0.04	-0.02	-0.03
	19	School2 (y=1)	*31%*	---	0.01	0.06	0.01	-0.10	-0.12	-0.06	0.02	-0.04	0.05
	20	School3 (y=1)	*6%*	---	-0.06	-0.02	0.04	0.07	-0.01	0.02	0.02	0.03	0.03
	21	School4 (y=1)	*24%*	---	0.06	-0.15	-0.04	0.11	0.06	0.03	0.12	0.04	0.07
	22	Industry1 (y=1)	*28%*	---	-0.04	-0.05	0.09	-0.01	0.01	0.02	-0.02	-0.15	0.01
	23	Industry2 (y=1)	*28%*	---	0.02	0.00	-0.06	0.05	0.07	-0.02	0.06	0.02	-0.03
	24	Industry3 (y=1)	*21%*	---	-0.03	-0.04	0.04	-0.01	-0.01	-0.02	-0.03	0.08	0.10
	25	Industry4 (y=1)	*8%*	---	0.08	-0.02	-0.08	-0.08	-0.22	-0.18	-0.04	-0.03	0.03
Other	**26**	Offer received (y=1)	*44%*	---	0.03	0.12	0.12	0.17	0.23	0.25	0.11	0.18	0.14
(26-27)	**27**	Offer received (supv.)(y=1)	*39%*	---	-0.09	0.10	0.17	0.12	0.19	0.29	0.08	0.30	0.21

Notes. N=480 to 527. N=74 for Offer received (supv.)(y=1). Other variables (26-27) were used to test the construct validity of performance. Reliability coefficients are displayed along the diagonal.

Means, Standard Deviations, Correlation Coefficients and Reliability Coefficients of Study Variables (2 of 3)

			M	*S*	10	11	12	13	14	15	16	17	18
Predictors	**1**	Competency LGO (t1)	*5.86*	*0.92*									
(1-6)	**2**	Company LGO (t1)	*5.99*	*0.76*									
	3	Competitive PGO (t1)	*5.10*	*1.32*									
	4	Supervisor LGO (t3)	*4.15*	*1.07*									
	5	Supervisor PGO (t3)	*4.54*	*1.03*									
	6	Socialization tactics (t2)	*3.57*	*0.80*									
DVs	**7**	Competency learning (t3)	*4.43*	*0.82*									
(7-9)	**8**	Company learning (t3)	*5.71*	*0.93*									
	9	Performance (t3)	*5.57*	*0.82*									
Mediators	**10**	Career networking (t3)	*4.28*	*1.06*	*(.82)*								
(10-16)	**11**	Feedback seeking (supv.) (t3)	*4.20*	*1.10*	0.38	*(.88)*							
	12	Feedback seeking (oth.) (t3)	*3.65*	*1.15*	0.59	0.56	*(.86)*						
	13	Feedback seeking (supv.)(t2)	*4.17*	*1.08*	0.33	0.63	0.43	*(.86)*					
	14	Feedback seeking (others)(t2)	*3.59*	*1.19*	0.37	0.38	0.55	0.59	*(.86)*				
	15	Perf. impr. management (t3)	*4.20*	*1.00*	0.39	0.60	0.43	0.39	0.25	*(.89)*			
	16	Learning strategies (t3)	*4.23*	*0.92*	0.24	0.25	0.31	0.21	0.25	0.28	*(.85)*		
Controls	**17**	Task collaboration (t2)	*4.93*	*0.93*	0.28	0.17	0.25	0.16	0.19	0.18	0.24	*(.78)*	
(17-25)	**18**	School1	*22%*	---	-0.02	0.01	-0.01	0.00	0.03	0.04	-0.04	-0.09	---
	19	School2	*31%*	---	0.00	-0.01	0.00	-0.05	-0.06	-0.05	-0.05	-0.02	-0.36
	20	School3	*6%*	---	-0.04	0.02	-0.04	0.03	0.03	0.02	0.02	0.03	-0.14
	21	School4	*24%*	---	0.10	-0.02	0.12	0.03	0.05	0.04	0.11	0.00	-0.30
	22	Industry1	*28%*	---	-0.05	-0.02	0.04	-0.07	0.01	0.03	0.01	-0.08	0.24
	23	Industry2	*28%*	---	0.06	-0.01	0.05	0.05	0.06	0.06	0.03	0.10	-0.06
	24	Industry3	*21%*	---	0.04	0.00	-0.07	-0.02	-0.08	-0.03	-0.01	0.09	-0.22
	25	Industry4	*8%*	---	0.02	-0.05	-0.02	-0.09	-0.11	-0.02	-0.03	-0.12	-0.03
Other	**26**	Offer received (y=1)	*44%*	---	0.04	0.10	0.08	0.12	0.14	0.11	0.06	0.05	0.08
(26-27)	**27**	Offer received (supv.)(y=1)	*39%*	---	-0.01	0.16	0.04	0.22	0.05	0.10	-0.03	0.19	-0.24

Notes. N=480 to 527. N=74 for Offer received (supv.)(y=1). Other variables (26-27) were used to test the construct validity of performance. Reliability coefficients are displayed along the diagonal.

Means, Standard Deviations, Correlation Coefficients and Reliability Coefficients of Study Variables (3 of 3)

			M	*S*	19	20	21	22	23	24	25	26
Predictors	**1**	Competency LGO (t1)	*5.86*	*0.92*								
(1-6)	**2**	Company LGO (t1)	*5.99*	*0.76*								
	3	Competitive PGO (t1)	*5.10*	*1.32*								
	4	Supervisor LGO (t3)	*4.15*	*1.07*								
	5	Supervisor PGO (t3)	*4.54*	*1.03*								
	6	Socialization tactics (t2)	*3.57*	*0.80*								
DVs	**7**	Competency learning (t3)	*4.43*	*0.82*								
(7-9)	**8**	Company learning (t3)	*5.71*	*0.93*								
	9	Performance (t3)	*5.57*	*0.82*								
Mediators	**10**	Career networking (t3)	*4.28*	*1.06*								
(10-16)	**11**	Feedback seeking (supv.) (t3)	*4.20*	*1.10*								
	12	Feedback seeking (oth.) (t3)	*3.65*	*1.15*								
	13	Feedback seeking (supv.)(t2)	*4.17*	*1.08*								
	14	Feedback seeking (others)(t2)	*3.59*	*1.19*								
	15	Perf. impr. management (t3)	*4.20*	*1.00*								
	16	Learning strategies (t3)	*4.23*	*0.92*								
Controls	**17**	Task collaboration (t2)	*4.93*	*0.93*								
(17-25)	**18**	School1	*22%*	---								
	19	School2	*31%*	---	---							
	20	School3	*6%*	---	-0.18	---						
	21	School4	*24%*	---	-0.38	-0.15	---					
	22	Industry1	*28%*	---	-0.06	-0.06	-0.04	---				
	23	Industry2	*28%*	---	-0.04	-0.04	0.12	-0.38	---			
	24	Industry3	*21%*	---	0.06	0.14	-0.01	-0.32	-0.33	---		
	25	Industry4	*8%*	---	0.08	-0.05	0.02	-0.18	-0.18	-0.15	---	
Other	**26**	Offer received (y=1)	*44%*	---	0.00	-0.05	-0.13	0.03	-0.02	-0.13	-0.20	---
(26-27)	**27**	Offer received (supv.)(y=1)	*39%*	---	0.04	0.17	-0.18	-0.07	0.07	0.08	-0.32	0.58

Notes. N=480 to 527. N=74 for Offer received (supv.)(y=1). Other variables (26-27) were used to test the construct validity of performance. Reliability coefficients are displayed along the diagonal.

APPENDIX B-1: Individual Scale Items

Predictors: Goal Orientations and Socialization Tactics

MBA students have various goals about learning and performing in their internships. Please indicate the extent to which you disagree or agree with each of the following statements about learning and performing in your internship. (*1=Strongly disagree, 7=Strongly agree*)

Competency Learning Goal Orientation (LGO) (Survey 1)

1. My internship goal is to develop new skills that are far beyond what I'll need to complete my work assignment.
2. I am highly motivated to learn new skills over and above what will be required in my internship.
3. I desire to completely master all the skills that I'll need to perform my work.*

**Deleted from scale due to poor discriminant validity.*

Company LGO (Survey 1)

1. I want to learn all there is to know about working for the organization
2. I want to completely understand what it's like to be an employee with the organization
3. I want to fully experience what working for the organization is like

Competitive PGO[1] (Survey 1)

1. My goal is to outperform most other MBA interns who will be working for my summer employer (others who may be qualified to work for my summer employer).
2. It is important for me to perform a lot better than other MBA interns who will be working for my internship employer (others my internship employer would consider hiring).
3. My goal is to demonstrate my ability to perform better than most other MBA interns working for the same organization (others who potentially could work for this organization).

Your primary manager is the manager who is most familiar with your work, and who you interact with most frequently. Please indicate the extent to which you disagree or agree with each statement about your primary manager. (*1=Strongly disagree, 7=Strongly agree*)

In my MBA internship, my primary manager...

Supervisor LGO (Survey 3)

1. Helped me learn new skills that went beyond what I needed to do my work.
2. Provided me opportunities to develop skills over and above what was required in my job.
3. Helped me completely master the skills I needed to perform my work.

[1] Wording in parentheses used if participant did not know if employer hired other MBA interns.

Supervisor PGO

1. Wanted to determine if I could meet competitive performance standards.
2. Was very interested in whether I could perform competitively in my job.
3. Wanted to know if I would demonstrate the ability to perform competitively in the organization.

Please indicate to what extent your internship employer provides you opportunity to have the following experiences. (*0=No opportunity, 5=Great deal of opportunity*)

My internship employer provides MBA interns opportunity to...

Context Tactics (Survey 2)

1. Get to know other MBA interns through a set of planned activities.
2. Receive a formal orientation to the job setting.
3. Go through a set of training experiences designed to provide interns with job related skills.
4. Obtain detailed information regarding the company's HR practices.

Content Tactics (Survey 2)

1. Have a clear understanding of a timetable of events for the internship.
2. Know what to expect of a typical MBA internship here.
3. Have a clear understanding of the company's practices regarding MBA internships.

Social Aspects Tactics (Survey 2)

1. Feel personally supported by colleagues in the organization.
2. Receive guidance from senior colleagues.
3. Learn their jobs by observing experienced members of the organization.

Mediators: Self-regulation Activities

Your primary manager is the manager who is most familiar with your work, and who you interact with most frequently. Please indicate the extent to which you relate in the following ways to your primary manager. (*0=To no extent, 5=To a very great extent*)

In my MBA internship, I try to...

Feedback Seeking-Boss (Survey 2 and 3)

1. Seek feedback from my primary manager on specific ways to improve my performance.
2. Solicit critiques from my primary manager.
3. Ask my primary manager about what skills I should improve.

Performance Impression Management (Survey 3)

1. Tried to make sure my primary manager valued all my work accomplishments.
2. Made every effort to impress my primary manager.
3. Was not too concerned about how my work was evaluated by my primary manager.*
4. Went out of my way to make a good impression on my primary manager.

**Deleted from scale due to poor discriminant validity.*

You may have interacted with people in your EMPLOYER organization BESIDES your primary manager (e.g., other managers, teammates, colleagues). Please indicate the extent to which you related in the following ways to others in your EMPLOYER organization BESIDES your primary manager. (*0=To no extent, 5=To a very great extent*)

Regarding others BESIDES my primary manager, I try to...

Feedback Seeking-Experts (Survey 2 and 3)

1. Seek feedback from experts in my work area on ways to improve my performance.
2. Solicit critiques from others with expertise in my work area.
3. Ask people with expertise in my work area about which skills I should improve.

Career Networking (Survey 3)

1. Talk to people inside my department or work area to learn how their careers developed.
2. Talk to people outside my department or work area to learn how their careers developed.
3. Develop relationships to learn more about the organization.

MBA interns may have had a variety of experiences in their work assignments. Please indicate the extent to which you disagree or agree with each statement about your <u>internship work assignment experiences</u>.(1=Strongly disagree, 6=Strongly agree)

Regarding my <u>work assignment</u>...

Learning Strategies (Survey 3)

1. My work assignment provided me opportunities to practice new skills.
2. In my job, I worked hard to adapt things I learned in the past to new situations.*
3. To fulfill my job responsibilities, I had to focus on acquiring new skills.
4. During my internship, I put a lot of effort into further developing skills I learned DURING B-school.
5. During my internship, I put a lot of effort into further developing skills I learned BEFORE B-school. *
6. To complete my internship assignment, I needed to develop new skills.

**Deleted from scale due to poor discriminant validity.*

Learning and Performance Outcomes

Competency Learning Index (Survey 3)

MBA interns may find some of their skills get worse, improve, or remain unchanged during their internship. (*-2=Worse, 0=Not changed, +4=Very much improved*)

Please indicate the extent to which your skills in each area have gotten worse, not changed, or improved compared to when you started your internship.

1. Interpersonal skills
2. Oral communication
3. Written communication
4. Solving business problems using quantitative analysis
5. Making decisions with imperfect information
6. Leadership skills
7. Thinking strategically about business problems
8. Technical competence in my specialty area (e.g., finance, marketing, operations)
9. Applying skills or knowledge learned in my MBA program (e.g., finance, marketing, ops.)
10. Negotiation skills

Performance Scale (Survey 3)

Please indicate the level of quality of your work in your internship assignment, compared to other MBA interns your employer may consider hiring full-time. Please be candid in your answers. All responses are confidential. (*1=Far below average, 3=Average, 7=Far above average*)

1. Development of professional relationships (e.g., with colleagues, customers).
2. Quality of my analytical work.
3. My overall internship performance.
4. Quality of work deliverables I completed during my internship.
5. Quality of written presentation(s) of my work.
6. Quality of oral presentation(s) of my work.*

**Deleted from scale due to poor discriminant validity.*

MBA interns may have had a variety of experiences in their work assignments. Please indicate the extent to which you disagree or agree with each statement about your internship work assignment experiences. (*1=Strongly disagree, 7=Strongly agree*)

Regarding my work assignment...

Company Learning (Survey 3)

1. I learned about potential MBA career paths in this ORGANIZATION.
2. I expanded my knowledge of the kind of work MBAs do in this ORGANIZATION.
3. I learned what a full-time job is like in this ORGANIZATION.

Company Learning (Survey 3) (Continued)

4. I learned what it takes to get ahead in this ORGANIZATION.
5. I gained enough information to decide if I'd want to work for this ORGANIZATION when I graduate.
6. I learned how people are rewarded in this ORGANIZATION.

Other variables

Task collaboration (control variable) (Survey 2)

1. I need information from my colleagues to perform my job well.
2. In my job, it is not necessary for me to coordinate with others.*
3. I need to collaborate with my colleagues to perform my job well.

**Deleted from scale due to poor discriminant validity.*

Performance indicator (Used to assess construct validity of performance scale) (Survey 3)

Completed by primary manager…

Please estimate the chance that your assigned MBA intern will be offered a full-time job with your employer, ranging from no chance (0%) to certain of an offer (100%). (100%=1, <100%=0)

Completed by MBA intern…

Have you received a full-time job offer from your summer internship employer? (Yes=1, no=0)

APPENDIX B-2

Exploratory Factor Analysis (EFA) Results (Split Sample)

Sample 1 (N=243)

Factor/Var.		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	**ctn2**	**.79**	.14	.04	.06	.05	.05	-.02	.08	.02	.13	.02	.07	.04	-.05
	ctn3	**.78**	.07	.08	.01	.04	.01	.07	.06	.03	.02	.05	.04	.00	-.13
	ctx2	**.76**	.07	-.01	-.05	.00	.00	.03	-.03	.00	.10	.03	.03	-.02	.00
	ctx1	**.71**	.12	-.02	.01	.09	-.02	-.03	.00	.05	.04	.07	.07	.20	.02
	ctn1	**.71**	.10	.04	.09	.05	-.06	.17	.09	-.01	.07	.00	.06	.04	-.07
	ctx3	**.66**	.07	-.05	.11	-.03	-.03	.10	.03	.09	.12	.01	.00	.06	.08
	ctx4	**.54**	.11	.07	.04	.00	.00	.02	.00	.01	.01	.05	.08	.01	-.04
	soc2	**.54**	.09	.10	.12	.14	.08	-.01	.28	.06	.05	.02	-.07	-.05	-.01
	soc1	**.49**	.16	.08	.13	.08	.05	.02	.27	.02	.04	-.04	-.05	.15	.00
	soc3	**.42**	.05	-.04	.18	.17	.12	-.12	.18	.16	.20	.10	.06	-.01	.10
2	**cl1**	.17	**.76**	.14	.11	.04	.05	.02	.09	-.04	.10	.04	-.01	.07	-.04
	cl2	.15	**.75**	.10	.11	.08	.08	.01	.06	.01	.06	.08	.02	.07	.03
	cl4	.11	**.74**	.11	.05	.15	.11	.02	.02	.04	.09	.05	.04	-.02	-.04
	cl6	.23	**.73**	.05	.07	.07	.07	.06	.01	.15	.07	.07	.07	-.03	.03
	cl3	.09	**.73**	.12	.11	.06	.04	.04	.07	.01	.10	.11	.05	.10	-.10
	cl5	.13	**.70**	.07	.14	.06	.00	.13	.07	-.03	.02	.07	.09	.00	.03
3	**p4**	-.06	.08	**.83**	.08	-.01	.03	.12	.09	-.04	.12	.04	.16	-.05	.02
	p5	.05	.09	**.83**	.07	.15	.02	.12	.11	.06	.06	.03	.09	-.01	.01
	p2	.03	.08	**.71**	.12	.10	.02	.06	.03	.01	.00	.02	.06	-.05	.04
	p1	.05	.07	**.62**	-.08	-.09	-.04	.15	.11	.10	.05	-.01	.09	.02	.07
	p3	.10	.12	**.54**	-.01	.06	.09	-.04	-.03	.04	.11	.03	.04	.03	.03
	p6*	.04	.21	.43	.11	.37	-.01	-.06	.14	.10	.07	.08	.11	-.03	-.06
4	**ls6**	.19	.12	-.02	**.82**	.01	.05	-.01	.12	.13	.02	-.02	.05	-.03	.09
	ls3	.12	.13	-.06	**.81**	-.02	.04	-.07	.18	.15	.04	.06	.00	-.01	.01
	ls1	.11	.18	.04	**.70**	.05	-.04	.00	.26	-.03	.06	-.02	.09	.09	.02
	ls4	.03	.04	.12	**.66**	.06	-.02	.23	-.02	.05	.14	-.05	.06	.02	.13
	ls2*	-.09	.16	.14	.46	.07	.10	.22	-.05	.01	.16	.03	.10	.10	-.06
	ls5*	-.03	.04	.12	.32	.23	-.04	.09	.09	.01	.06	.01	.09	.01	-.02
5	**cn3**	.01	.18	.17	.11	**.75**	.01	.03	.05	.21	.01	.15	.16	.10	.03
	cn2	.09	.10	.06	.03	**.75**	-.03	.06	.04	.22	.02	-.09	.05	.06	.13
	cn1	.22	.13	.01	.03	**.65**	.05	.20	.04	.23	.11	.10	.12	.13	-.06
6	**pg2**	.02	.05	.04	.08	.11	**.90**	.06	.02	.01	.03	.03	.01	-.02	.13
	pg1	.03	.08	.03	.04	.00	**.82**	.00	-.02	.02	.05	.08	.02	-.01	.14
	pg3	-.03	.15	.04	-.09	-.10	**.72**	.04	.00	.16	.04	.06	.14	.01	.15
7	**fsm2**	.09	.12	.21	.13	.14	.04	**.76**	.12	.16	.05	.01	.23	.09	.01
	fsm1	.17	.13	.18	.09	.13	.06	**.74**	.12	.21	.07	.04	.29	.09	.06
	fsm3	.12	.04	.13	.15	.06	.05	**.57**	.08	.40	.15	.02	.21	.15	.10
8	**mlg1**	.11	.10	.12	.28	.07	-.02	.10	**.74**	.05	.25	.06	.05	.05	-.01

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	**mlg3**	.22	.18	.16	.20	.04	.00	.21	**.68**	.10	.29	.01	.06	-.01	.06
	mlg2	.18	.11	.24	.29	.11	.01	.05	**.63**	.01	.35	.02	.10	.03	-.02
9	**fso3**	.07	.07	.02	.10	.31	.06	.19	.04	**.75**	.05	.00	.08	.09	.02
	fso2	.16	.03	.08	.17	.26	.18	.20	.01	**.67**	.05	.07	.21	.13	.07
	fso1	.04	.00	.19	.16	.37	.08	.24	.07	**.63**	.03	.00	.16	.07	.08
10	**mpg3**	.29	.23	.16	.13	.07	.12	.09	.24	-.08	**.72**	.04	.11	.04	-.01
	mpg2	.28	.17	.21	.21	.03	.09	.06	.28	.10	**.71**	.00	.13	.06	-.04
	mpg1	.25	.13	.16	.16	.07	.01	.09	.29	.12	**.67**	-.01	.01	.09	.00
11	**clg2**	.02	.10	.00	.01	.03	.11	.03	.01	-.01	-.04	**.84**	.05	.00	-.01
	clg3	.07	.11	.06	.04	.01	.07	-.06	.01	.04	-.02	**.83**	.02	.08	.11
	clg1	.11	.09	.05	-.06	.06	-.02	.07	.02	-.02	.08	**.57**	.05	.13	.06
12	**pim4**	.08	.02	.16	.15	.12	.06	.11	-.01	.16	.09	.02	**.69**	.11	.02
	pim2	.12	.13	.21	.03	.17	.06	.25	.09	.05	.03	.09	**.69**	.06	.05
	pim1	.12	.10	.25	.13	.09	.09	.28	.08	.13	.07	.07	**.61**	-.02	.05
13	**tc3**	.22	.09	.05	.13	.06	.01	-.04	.11	.10	.17	.09	.13	**.71**	.05
	tc1	.06	.04	-.04	.09	.14	.02	.06	.04	.08	.07	-.03	.02	**.71**	-.02
	tc2r*	-.01	-.01	.05	.08	-.03	.06	-.10	.03	-.03	.06	-.10	.00	-.49	.07
	pim3r*	-.04	-.06	.02	-.05	.11	-.05	-.05	.14	.19	-.02	-.09	-.09	-.19	.06
14	**lg1**	-.11	-.07	.06	.00	.04	.11	-.04	-.02	.03	-.02	-.06	.08	-.02	**.68**
	lg2	-.07	.05	.02	.14	.06	.20	.14	.04	.02	.06	.16	-.04	-.02	**.61**
	lg3*	.03	-.09	.10	.06	-.01	.21	.03	.04	.12	-.11	.24	.05	-.14	.46

Notes. Principal axis analysis, varimax rotation. ctn= content tactics; ctx=context tactics; soc=social aspects tactics; cl=company learning; p=performance; ls=learning strategies; cn=career networking; pg=performance goal orientation; fsm=feedback seeking (supervisor); mlg=supervisor learning goal orientation; fso=feedback seeking (others); mpg=supervisor performance goal orientation; clg=company learning goal orientation; pim=performance impression management; tc=task collaboration; lg=learning goal orientation. Retained scale items outlined and marked in bold. Deleted scale items noted with an asterisk (*).

Exploratory Factor Analysis (EFA) Results (Split Sample)

Sample 2 (N=231)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	**ctx1**	**.81**	.14	.07	-.10	-.04	.04	.03	.00	.08	.00	.03	.10	-.08	-.03	-.07
	ctn2	**.79**	.10	.11	-.02	.07	.11	-.04	.14	.01	.08	.07	.01	-.02	.01	.05
	ctn3	**.76**	.20	.09	-.02	.06	.06	-.01	.09	.08	.05	.02	.01	-.08	-.03	.08
	ctx2	**.69**	.11	.09	.00	-.05	-.04	-.07	.08	.02	.00	.04	.04	.10	.02	.03
	ctn1	**.67**	.07	.08	.05	.04	.19	-.03	-.06	.07	-.02	.01	.03	-.07	.11	.10
	ctx3	**.67**	.02	.06	.00	.09	.10	.02	.16	-.02	.09	.14	.01	.08	.04	.09
	ctx4	**.46**	.14	.09	.08	.02	.07	.03	-.04	.21	-.08	.00	-.01	.05	-.08	.14
2	**cl4**	.13	**.71**	.06	.09	-.01	.05	.02	.11	.26	.07	.12	.08	-.06	.01	.00
	cl3	.13	**.67**	.01	.12	.10	.18	.03	.10	.01	.10	-.06	.03	.14	.16	.18
	cl5	.12	**.65**	.10	.10	.18	.04	.05	.03	.05	-.02	-.01	.08	.01	.06	.10
	cl1	.27	**.64**	.08	.05	.14	.14	.00	.11	.15	.27	.05	.04	.02	-.09	.16
	cl2	.24	**.62**	.00	.14	.14	.15	.00	.02	.04	.30	.13	.05	.11	-.08	.05
	cl6	.33	**.57**	.10	.03	.05	.03	-.04	.12	.13	.08	.08	.00	.00	.09	-.15
3	**fsm1**	.21	.01	**.83**	.18	.03	.13	.03	.08	.04	-.04	.13	.02	.04	.07	.06
	fsm2	.16	.12	**.82**	.09	.00	.14	.00	.11	.07	-.01	.05	.01	.01	.09	.04
	fsm3	.16	.04	**.70**	.04	.10	.12	.09	.12	.19	.05	.20	-.08	.00	.08	-.06
3/14	**pim1**	.05	.08	.55	.21	.11	.05	.06	.06	.06	.10	.00	.12	.07	**.46**	.07
4	**p4**	-.06	.03	.10	**.85**	.00	.09	.05	.10	.10	-.04	-.01	.02	.07	.10	.01
	p5	-.04	.05	.13	**.81**	.07	.18	.04	.15	.08	.00	-.02	.01	.10	.02	.05
	p1	-.01	.14	.06	**.76**	-.01	-.01	.08	.09	-.03	-.01	.02	-.08	-.07	-.01	.00
	p2	.05	.10	.08	**.60**	.11	.04	.01	-.08	.03	-.05	.09	.04	.06	.16	-.02
	p3	.08	.03	.05	**.41**	.09	.00	.07	-.04	.04	.05	.12	.01	.10	-.06	.03
	p6*	.03	.19	.24	.33	.03	.05	.04	.11	.24	.09	.11	.10	-.07	.06	.10
5	**ls3**	.07	.08	.02	-.04	**.80**	-.02	.04	.13	.01	.06	.10	.09	.06	.00	-.01
	ls6	.02	.17	.07	-.01	**.79**	.07	-.07	.18	.00	.06	.01	.13	.10	.00	.00
	ls1	.12	.08	.08	.12	**.68**	.14	.01	.13	.13	.00	.03	.12	.01	.05	.12
	ls4	-.08	.04	.03	.14	**.58**	.10	.00	.02	.15	-.01	.11	.08	.05	.15	.04
	ls2*	.13	.20	.10	.15	.28	.27	.06	-.10	.05	-.05	.01	-.06	.12	.08	.11
6	**mpg2**	.17	.18	.19	.12	.06	**.76**	.01	.29	.03	-.01	.02	.15	-.05	.09	-.01
	mpg3	.21	.17	.24	.11	.14	**.67**	.03	.31	.05	.10	.04	.10	-.09	-.04	.04
	mpg1	.28	.14	.17	.16	.17	**.66**	-.02	.28	.04	.10	.03	.09	-.07	.00	.06
7	**pg1**	-.01	-.01	.04	.02	.06	.09	**.83**	-.03	-.01	.07	-.03	.02	-.01	.10	-.09
	pg3	-.09	-.06	.04	.01	-.02	.00	**.77**	.00	-.03	.08	.01	.00	.08	.01	.04
	pg2	-.01	.09	.07	.14	-.03	-.07	**.75**	.00	.09	-.01	.05	.04	.18	-.02	-.03
	lg3*	-.02	.12	-.04	.13	.03	.01	.33	.01	.09	.16	.06	-.06	.25	.27	.05
8	**mlg3**	.23	.11	.20	.19	.12	.21	-.01	**.72**	.00	.07	.06	.05	-.06	.07	.07
	mlg2	.09	.19	.05	.10	.22	.38	.00	**.69**	.12	-.02	.06	.00	.06	.09	.12
	mlg1	.18	.12	.18	.06	.25	.21	-.02	**.69**	.04	-.03	-.07	-.08	.04	-.01	.05
9	**cn2**	.25	.12	.05	.07	.06	-.09	.01	.05	**.67**	.07	.24	.20	.04	.08	.02

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9	**cn1**	.14	.22	.20	.10	.09	.12	.01	.02	**.66**	.05	.22	-.02	.13	.09	.10
	cn3	.03	.20	.22	.11	.21	.11	.05	.07	**.64**	.19	.13	.18	-.06	.14	.12
10	**clg3**	.10	.16	-.04	.01	.04	.03	-.03	-.07	.06	**.76**	.07	-.02	.06	-.07	.02
	clg2	.04	.08	.08	-.03	.04	.08	.20	.00	-.02	**.71**	-.07	.07	-.06	.02	-.08
	clg1	-.02	.08	.01	-.05	.00	-.03	.03	.10	.14	**.68**	.07	.03	.07	.12	.13
11	**fse3**	.12	.17	.28	.09	.16	.04	.03	.09	.32	-.01	**.66**	.03	.07	.03	.09
	fse1	.14	.03	.23	.15	.15	.11	.10	.02	.32	.05	**.60**	.07	.06	.01	.09
	fse2	.20	.16	.29	.11	.14	.14	-.04	-.04	.18	-.06	**.53**	.15	.07	.11	.05
	pim3r*	.00	-.04	-.08	-.06	-.01	-.12	-.02	-.01	.01	.11	.34	-.03	-.18	-.03	-.15
12	**tc3**	.11	.09	.07	.06	.10	.00	-.05	.02	.07	.07	.07	**.82**	.04	-.01	.07
	tc1	.08	.10	.00	-.03	.18	.07	.07	-.04	.08	.05	.06	**.63**	-.05	.05	-.05
	tc2r*	.02	.04	.05	.03	-.06	-.18	-.02	-.02	-.04	.05	.03	-.33	.01	-.02	-.16
13	**lg2**	.01	.10	.04	.12	.14	-.05	.11	-.03	.02	.06	-.04	-.03	**.77**	-.06	-.03
	lg1	-.01	-.01	.01	.00	.06	-.05	.13	.03	.05	.01	.02	.01	**.71**	.05	.05
14	**pim2**	.06	.15	**.48**	.14	.13	.07	.11	.17	.09	.11	-.09	.04	.01	**.64**	.01
	pim4	.03	.05	**.37**	.16	.12	.03	.07	.01	.21	-.03	.12	.03	-.03	**.60**	.00
15	**soc1**	**.45**	.17	.01	.05	-.03	.12	-.08	.15	.07	.07	.01	.13	.10	.12	**.55**
	soc2	**.35**	.19	.14	.03	.17	.04	-.11	.04	.18	-.03	-.05	.15	-.06	-.07	**.51**
	soc3	**.36**	.13	-.02	.04	.15	-.02	.00	.21	.11	.23	.11	.04	.09	.03	**.44**
	ls5*	.11	.12	-.05	.03	.22	.00	.08	-.02	.24	.04	.11	-.03	.10	-.03	.00

Notes. Principal axis analysis, varimax rotation. ctn= content tactics; ctx=context tactics; soc=social aspects tactics; cl=company learning; p=performance; ls=learning strategies; cn=career networking; pg=performance goal orientation; fsm=feedback seeking (supervisor); mlg=supervisor learning goal orientation; fso=feedback seeking (others); mpg=supervisor performance goal orientation; clg=company learning goal orientation; pim=performance impression management; tc=task collaboration; lg=learning goal orientation. Retained scale items are outlined and marked in bold. Deleted scale items noted with an asterisk (*).