Newcomer Socialization: The Roles of Social Networks

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA
BY

Yongjun Choi

IN PARTIAL FULFILLMENT OF THE REQUIREMENT
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Connie R. Wanberg, Adviser

July 2014

© Yongjun Choi 2014

Acknowledgements

I could never have come this far without the help and support of so many generous and supportive people. First, I owe my deepest gratitude to my advisor and role model, Dr. Connie Wanberg, for her excellent guidance, caring, and patience. Whenever I faced difficulty in my research and teaching, she was always there to help. The past five years I spent under her guidance were certainly the most invaluable time for learning in my life and will serve as the foundation for my successful academic career as a great researcher and teacher. I am also very grateful to my committee chair, Dr. Pri Shah, and committee members Drs. Lisa Leslie, Moin Syed, and David Knoke for giving me constructive comments and suggestions for this dissertation.

I am especially grateful to the Society of Human Resource Management (SHRM) Foundation and the HR Division of the Academy of Management which awarded me the SHRM Foundation Dissertation Grant and to the Department of Work and Organizations for their Small Research Grant. Without their financial support, this dissertation would have not been feasible.

I was fortunate to meet many great people in Twin Cities who encouraged me and helped me navigate throughout my graduate studies at the University of Minnesota. KiYoung Lee has always had an office next to me and has been my hotline for intellectual support, both at U of M and in South Korea when we were in the master's program. Dr. David Jeehyun Yoon, my friend, always helped whenever things were going badly. I thank Drs. Youngeun Chu, Eugene Kim, Kyungwon Park, and Tae-Youn Park who helped me navigate my graduate studies. I thank Ribuga Kang and Si Ahn Mehng, who started the PhD program with me. I will never forget our comradeship,

especially during the first two years of coursework. I am also grateful to Carlson School of Management Korean PhD students Yeonka Kim, Yoonhee Choi, Sumi Jung, Sangwook Nam, Jayoung Koo (and JungwonAhn), Keeson Nam, Jin Park, Jaehwuen Jung, and Sehwon Kang. My fellow doctoral students in the department also contributed enormously to helping me complete my degree. I especially thank Greg Beaver, who spent his first years with me in 3-300E, and Tao Yang and John-Gabriel Licht, my friends and coworkers.

Reaching this stage would have been impossible without endless love and support from my family. I am so blessed to have my parents, Kyungnam Choi and Soonae Park, who have always supported my decisions. My sister Sangyoun Choi, brother-in-law Heeyoon Lee, and niece Seohyun Lee were my best friends and top supporters encouraging me to pursue my education. I also thank my parents-in-law, Yongkoo Kim and Sangyi Lee, and brother-in-law Sejung Kim for supporting me and my wife during this sojourn in the United States.

Finally, and most importantly, I acknowledge the unwavering love and support that my wife, Dr. Min Jung Kim, has shown during my graduate studies. We began our life as a married couple in Minnesota, promising to go through life together. We have shared many great experiences that will be the basis for wonderful future memories. Now, as we move on, I anticipate a joyful journey for years to come.

Abstract

As newcomers transition into new organizational settings, organizational insiders serve as important information and social support resources to help newcomers adapt to their new work environments. In this study, I develop and test a model showing how newcomers develop their communication networks over time, and revealing how this dynamic aspect of the newcomer socialization process may facilitate newcomer adjustment and success in the workplace. I conduct a three-wave longitudinal study within the first 28 weeks of employment and find that institutionalized socialization tactics, task interdependence, and proactive personality partially help newcomers form their communication networks. Second, I find that newcomers' communication networks facilitate newcomer adjustment but only at time 2 (week 16) and time 3 (week 28). Third, findings only marginally support the proposition that newcomers' communication networks mediate the relationships between proactive personality and task mastery. However, newcomers' communication networks did not mediate the relationships between other two socialization factors – institutionalized socialization tactics and task interdependence – and newcomer adjustment. Fourth, findings generally support the proposition that newcomer adjustment predicts intrinsic career success. The post hoc analysis indicates that newcomer adjustment mediates the relationships between socialization factors and career success. Last, findings fail to support the proposition that socialization factors explain how quickly newcomers develop their communication networks. However, the preliminary results show that communication networks develop during the very early entry period.

Table of Contents

List of Tables vi
List of Figures vii
Chapter 1: Introduction 1
Chapter 2: Literature Review 7
I. Newcomer Socialization 7
a. Conceptualization of Newcomer Socialization 7
b. Brief Review on Newcomer Socialization 8
c. Dynamic Nature of Newcomer Socialization Process 11
II. Newcomer's Social Networks 13
a. Egocentric Networks 13
b. Social Networks in Newcomer Socialization 14
c. Social Network Dynamics 17
Chapter 3: Theoretical Framework 22
I. Socialization Factors and Newcomer's Communication Networks 22
a. Institutionalized Socialization Tactics 22
b. Task Interdependence 24
c. Proactive Personality 27
II. Newcomer's Communication Networks and Newcomer Adjustment 31
III. Mediation Effects of Newcomer's Communication Networks 34
IV. Newcomer Adjustment and Newcomer Career Success 37
Chapter 4: Method 42
I. Participants 42
II. Timing 43
III. Measures 45
IV. Analysis 50
Chapter 5: Results 53
I. Socialization Factors and Newcomer's Communication Networks 54
II. Newcomer's Communication Networks and Newcomer Adjustment 56
III. Mediation Effects of Newcomer's Communication Networks 57
IV. Newcomer Adjustment and Newcomer Career Success 59

V. Post Hoc Analysis 61
Chapter 6: Discussion 65
I. Brief Recap of Study Findings 65
II. Theoretical Contributions.....66
III. Practical Implications.....72
IV. Limitations and Future Research Directions 74
Tables and Figures 78
References.....100
Appendix I: Newcomer Survey Items.....116
Appendix II: Supervisor Survey Items 122

List of Tables

Table 1: Organizational Socialization Tactics Dimensions 78
Table 2: Research Design for Changes in Newcomer Socialization and Social Networks Literature 79
Table 3: List of Variables Measured at Each Time Wave 80
Table 4: Descriptive Statistics, Reliability Coefficients, and Correlations 81
Table 5: Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer's Communication Networks 84
Table 6: Parameters Estimates of Latent Growth Models (Newcomer's Communication Networks) 85
Table 7: Results of Hierarchical Multiple Regression Analysis for the Effects of Newcomer's Communication Networks on Newcomers Adjustment 86
Table 8: Parameters Estimates of Latent Growth Models (Newcomer Adjustment) 87
Table 9: Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer Adjustment 88
Table 10: Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer's Communication Networks on the Relationships between Institutionalized Socialization Tactics and Newcomer Adjustment 89
Table 11: Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer's Communication Networks on the Relationships between Proactive Personality and Newcomer Adjustment 90
Table 12: Results of Hierarchical Multiple Regression Analysis for the Effects of Newcomer Adjustment on Newcomer Career Success 91
Table 13: Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer Career Success (post hoc analysis) 92
Table 14: Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer Adjustment on the Relationships between Institutionalized Socialization Tactics and Newcomer Career Success (post hoc analysis) 93
Table 15: Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer Adjustment Outcomes on the Relationships between Proactive Personality and Newcomer Career Success (post hoc analysis) 96

List of Figures

Figure 1: Research Model.....97
Figure 2: Newcomer's Communication Networks over Time.....98
Figure 3: Newcomer Adjustment over Time 99

Chapter 1: Introduction

Newcomers become successful organizational insiders through the process of organizational socialization. Because newcomers face newness and uncertainty, they need a wide range of job- or organization-related information to transition successfully. According to the uncertainty reduction process, to reduce uncertainties, social relationships with peers and supervisors are important because significant organizational information is communicated and shared through social interactions (Saks & Ashforth, 1997). Social relationships are also essential for newcomer socialization because they serve as information sources that determine newcomers' attitudes and behaviors at work and are also valuable resources of social support to help newcomers feel welcome and socially integrated. Beyond newcomer socialization, social relationships are important resources that can help newcomers achieve better work outcomes leading to success through, for example, promotions and salary increases. However, to benefit from social interactions, newcomers must first form quality relationships with other organizational members. Newcomer socialization is also critical for organizations because newcomers who experience successful socialization processes will eventually contribute better to organizational performance. Formal orientation or training programs related to newcomer socialization are costly, and organizations must get new hires acclimated and adjusted quickly. Hence, organizations and newcomers can both benefit when newcomers adjust to their work and workplace by rapidly establishing quality relationships with organizational members.

In the last two decades, the socialization literature has done well in explaining newcomer socialization processes. First, studies on newcomer socialization have directed

attention to two aspects of newcomer socialization: learning (e.g., task mastery, role clarity) and social assimilation (e.g., social integration or group integration) (Morrison, 2002). They have explored a wide range of antecedents for newcomer adjustment (e.g., role clarity, task mastery, and social integration) focusing on the roles of organizations (e.g., organizational socialization tactics), newcomers (e.g., proactivity), and insiders (e.g., coworkers or supervisors). The literature has given little attention, however, to the roles of insiders in facilitating newcomer socialization. Specifically, although social relationships are potentially important in facilitating newcomer socialization, prior studies on socialization have mainly focused on newcomer adjustment outcomes or on how newcomers utilize insiders to facilitate their adjustment. For instance, in the newcomer socialization context, insiders serve as important sources of job- or firm-related information (e.g., Morrison, 1993b) and social support for newcomers (e.g., Allen, McManus, & Russell, 1999; Fisher, 1985). Those studies include the assumption that new hires have already established relationships with insiders. However, we know little about how newcomers form their new relationships with other organizational members when they first begin their jobs. Similarly, the social networks literature has paid relatively little attention to the antecedents of social networks, although abundant evidence shows positive outcomes of interpersonal networks such as higher job satisfaction, power, and performance (Brass, Galaskiewicz, Greve, & Tsai, 2004; Nebus, 2006).

Second, most prior empirical studies on newcomer socialization have mainly focused on traditional adjustment outcomes important during the transition stage, such as role clarity and task mastery. At some point, however, newcomers are no longer considered novices. One question is whether successful socialization is also rewarding for

employees and organizations even after newcomers become experienced organizational members. Fang, Duffy, and Shaw (2011) have established a theoretical model arguing that newcomer adjustment can determine subsequent career success such as promotion, salary, and career satisfaction. However, empirical studies integrating career success and newcomer socialization are still rare.

Third, recent socialization studies have deepened our knowledge about the dynamics of newcomer socialization processes. Although the process inherently involves changes, most empirical studies on newcomer socialization have paid little attention to the impact of time. In addition, although most prior socialization studies were based on longitudinal research design, the constructs on interest were generally measured only once at different times. For instance, to examine the roles of proactive personality and socialization agents on new employee adjustment, Kammeyer-Mueller and Wanberg (2003) measured the independent variables in new employees' fifth month and the adjustment variables in their ninth month. However, this cross-section design disallows an examination of adjustment changes over time. Fortunately, interest is recently growing about examining changes in newcomer socialization (e.g., Boswell, Shipp, Payne, & Culbertson, 2009; D. Chan & Schmitt, 2000; Jokisaari & Nurmi, 2009; Kammeyer-Mueller, Wanberg, Rubenstein, & Song, 2013; Lance, Vandenberg, & Self, 2000). Those studies have significantly contributed to socialization literature by building knowledge on the dynamic aspects of newcomer socialization. However, they have mainly focused on the positive or negative patterns of changes over time, so we still have limited knowledge about how quickly newcomers can adjust to their jobs and organizations.

In this study, I seek to increase knowledge about the dynamics of newcomer socialization processes by examining how newcomers develop their social networks over time, and the role that this aspect of the newcomer socialization process may play in facilitating newcomer adjustment and career success. In particular, I investigate the development of newcomers' communication networks over time to explain how socialization factors facilitate newcomer adjustment. Beyond the traditional socialization outcomes, I also seek to examine how successful socialization can enhance career success.

This study contributes to the literature in several ways. First, I examine the roles of a contextual factor (organizational socialization tactics), a job characteristic (task interdependence), and an individual difference (proactive personality) as potential facilitators for newcomers' social network development and adjustment. Although job characteristics may determine new hires' social interactions, prior studies have paid little attention to job characteristics in the context of newcomer socialization. Hence, I extend the antecedents of newcomer socialization by adding task interdependence as a critical job characteristic to facilitate newcomer socialization. Beyond the newcomer socialization literature, knowledge regarding the antecedents of social network development is also fairly scant: the social network literature has tended to focus on the outcomes of social networks rather than the antecedents (Brass et al., 2004; Nebus, 2006). Hence, examining the three factors as antecedents for newcomers' social network development will advance knowledge regarding social network development.

Second, I examine time as a force in newcomer socialization. Although the socialization process involves changes, empirical socialization studies have rarely examined the role of time. Most social networks studies have also taken static rather than

dynamic views. Thus, I explore how newcomers develop their communication networks over time and how the newly developed communication networks affect workplace adjustment. Specifically, by incorporating a dynamic perspective, I examine newcomer, job, and situational characteristics that allow newcomers to develop their social networks faster than others, and I examine how the developed social networks affect successful transition.

Third, I expand the traditional role clarity, task mastery, and social integration outcomes of newcomer socialization by incorporating career success as a distal outcome of newcomer adjustment. I argue that successful socialization has implications for overall career success as well as organizational functioning. Although Fang et al. (2011) proposed that newcomer socialization can enhance careers, they based their argument on long-term career outcomes. However, I focus on potential career success as newcomers enter new organizations.

Last, I examine whether newcomers' social networks explain newcomer socialization processes. Although it is well established that socialization factors affect newcomer adjustment, calls continue for examining the mechanisms (e.g., Saks, Uggerslev, & Fassina, 2007). Whereas Morrison (2002) examined information and friendship social networks as independent variables for newcomer adjustment, I examine whether the communication networks may be important mediators explaining how organizational and individual factors affect the newcomer socialization process.

In summary, I examine (1) the antecedents of newcomers' communication network development and work adjustment, (2) the roles of time in the socialization process by exploring the speed of newcomer adjustment, and (3) the distal outcomes of

newcomer adjustment: career success within the newcomer socialization context. I centrally argue that when newcomers enter organizations, they develop communication networks over time in a dynamic socialization process that impacts their adjustment and career success. Figure 1 depicts the research model.

Several boundary conditions apply to this study. First, I focus on newcomers' egocentric networks: "an individual's unique set of social contacts" (Morrison, 2002, p. 1152), rather than focusing on complete networks that look at all ties in a closed unit (Marsden, 1990). Recognizing that newcomers account for only a part of the whole organizational social structure, Morrison (2002) argued that egocentric network data are better for exploring social networks in newcomer socialization. Second, I focus only on interpersonal networks within the organization. In terms of job performance, depending on occupations or tasks, relationships with outsiders can be more important than those with insiders. However, from the newcomer socialization perspective, relationships with insiders can be more significant because they serve as important sources of information and social support to reduce uncertainties and facilitate adjustment.

Chapter 2: Literature Review

Theories and empirical studies on newcomer socialization have made illuminating progress over the last two decades. In this chapter, I review advances in the field of newcomer socialization and social networks that serve as the theoretical basis for this study.

I. Newcomer Socialization

a. Conceptualization of Newcomer Socialization

Organizational socialization and newcomer adjustment have been the main topics in studies of newcomer socialization. Organizational socialization refers to "the process by which an individual acquires the social knowledge and skills necessary to assume an organizational role" (Van Maanen & Schein, 1979, p. 211). Studies of organizational socialization especially emphasize organizational socialization tactics in facilitating newcomer learning. Studies on newcomer adjustment, on the other hand, emphasize "the personal process of establishing oneself as a functioning member of the job, group, and organization" (Hurst, Kammeyer-Mueller, & Livingston, 2012, p.5). In other words, whereas organizational socialization focuses on how organizations or groups facilitate newcomer adjustment by providing relevant information or resources, newcomer adjustment emphasizes how newcomers adjust and become insiders (Hurst et al., 2012). However, the literature frequently interchanges organizational socialization and newcomer adjustment. Recently organizational socialization has been more broadly defined as "the process by which newcomers make the transition from being organizational outsiders to being insiders" (Bauer, Bodner, Erdogan, Truxillo, & Tucker,

2007, p. 707). In this study, I use *newcomer socialization* as an umbrella term including both newcomer adjustment and organizational socialization.

b. Brief Review on Newcomer Socialization

Previous studies on newcomer socialization have explored a wide range of antecedents that facilitate newcomer adjustment to new roles and organizations. First, organizational socialization studies have focused mainly on organizational socialization tactics: "the ways in which the *experiences* [italic added] of individuals in transition from one role to another are structured for them by others in the organization" (Van Maanen & Schein, 1979, p. 230). Socialization researchers have attempted to categorize organizational socialization tactics. Table 1 provides an overview of organizational socialization tactics dimensions by Van Maanen and Schein (1979) and Jones (1986).Van Maanen and Schein (1979) defined organizational socialization tactics along six dimensions: (1) collective vs. individual, (2) formal vs. informal, (3) sequential vs. random, (4) fixed vs. variable, (5) serial vs. disjunctive, and (6) investiture vs. divestiture. Later, Jones (1986) categorized Van Maanen and Schein's (1979) organizational socialization tactics into context (collective / individual, formal / informal), content (sequential / random, fixed / variable), and social tactics (serial / disjunctive, investiture / divestiture). He also argued that the two ends of the six continua will produce different role orientations. That is, he grouped the six socialization tactics at one end (individual, informal, variable, random, disjunctive, and divestiture) and identified them as *individualized socialization tactics* because they are more likely to produce innovative role orientations. He referred to the other group of six socialization tactics at the opposite end (collective, formal, sequential, fixed, serial, and investiture) as *institutionalized*

socialization tactics that would produce passive or custodial role orientations. The institutionalized socialization tactics are likely to be associated with orchestrated, planned events; the individualized socialization tactics are related to spontaneous, unplanned events (Ashforth & Saks, 2002). In other words, institutionalized socialization tactics are relatively more systematic than are individualized socialization tactics.

As two recent meta-analysis studies demonstrated (Bauer et al., 2007; Saks et al., 2007), organizational socialization tactics strongly predict newcomer adjustment. Saks et al. (2007) showed that organizational socialization tactics are the strongest predictor for both proximal (role conflict, role ambiguity, and perceived fit) and distal outcomes (organizational commitment, job satisfaction, job performance, intentions to quit, and role orientation). That is, newcomers who experience organizational socialization tactics are more likely to adjust successfully. In addition, among the three categories of organizational socialization tactics, context tactics were the weakest predictor. Although most empirical studies have demonstrated that institutionalized socialization tactics positively affect newcomer socialization, the effects of individualized tactics are still less clear (Fang et al., 2011).

Second, socialization researchers have directed attention to newcomers' roles in facilitating their adaptation, with major attention paid to newcomer proactivity. The seminal work by Ashford and Black (1996) suggested that newcomers engage in seven major types of proactive socialization tactics: information-seeking, feedback seeking, negotiation of job changes, positive framing, general socializing, building a relationship with one's boss, and networking. Socialization studies show that newcomers who engage in proactive socialization tactics are more likely to show higher social integration, role

clarity, job satisfaction, and learning (e.g., Ashford & Black, 1996; Ashforth, Sluss, & Saks, 2007; Gruman, Saks, & Zweig, 2006; Wanberg & Kammeyer-Mueller, 2000). A supporting meta-analysis also showed that newcomer information-seeking is positively associated with role clarity, social acceptance, and organizational commitment (Bauer et al., 2007). Although most attention has been paid to newcomer proactive behaviors, some researchers have explored effects of individual differences in newcomer socialization. For instance, Wanberg and Kammeyer-Mueller (2000) showed that newcomers who report being highly extraverted are more likely to seek feedback and build relationships. Those who are highly open to experience also tend to seek more feedback and show positive framing behaviors.

Last, researchers have explored the importance of insiders. Peers seem to serve as especially important socialization agents. Louis, Posner, and Powell (1983) explained that among various newcomer socialization practices (e.g., orientation, training, or mentoring), newcomers perceive their daily interaction with peers as most helpful for their successful socialization. Peers provide social support (Allen et al., 1999; Nelson & Quick, 1991) and are important sources of normative and social information (Morrison, 1993b; Ostroff & Kozlowski, 1992). Regarding technical and job-related information (e.g., role demands, performance feedback), however, newcomers are likely to rely on their supervisors (Morrison, 1993b). Insiders as a group also affect the newcomer socialization process. For instance, Chen (2005) demonstrated that team-level expectations toward newcomers predict newcomers' performance approximately 42 days after employment. Although team-level expectations did not explain the performance

improvement over time (approximately between 42 and 84 days after employment), the findings imply that insiders are essential in newcomer socialization processes.

In summary, proactive newcomers, supportive organizations, and insiders are all main socialization agents for successful newcomer socialization. The socialization literature, however, has given little attention to insider roles despite their importance in newcomer socialization. We need better understandings about how newcomers establish connections with organizational insiders and how important those connections are to newcomer adjustment and other work outcomes.

c. Dynamic Nature of Newcomer Socialization Process

Newcomer socialization is purported to be dynamic, involving incremental changes in experiences, learning, and adjustments on the part of the newcomer over time. Feldman (1976; 1981) proposed a stage model of organizational socialization delineating five stages that newcomers experience after they enter organizations: anticipatory socialization, encounter, change and acquisition, behavioral outcomes, and affective outcomes. In addition, learning, a key goal in newcomer socialization, is a continuous process. In other words, over time, newcomers evolve into experienced insiders.

Previous studies on newcomer socialization have provided empirical evidence that newcomers' attitudes and behaviors change over time; for example, newcomer adjustment variables such as self-efficacy, role clarity, and social acceptance evolve as time passes (Bauer & Erdogan, 2011). In the first third month of employment, newcomers' mean self-efficacy was the highest; in the ninth month, role clarity and social acceptance were highest. Boswell, Shipp, Payne, and Culbertson (2009) also demonstrated that job satisfaction has a temporal nature during the first twelve months of

employment. Specifically, job satisfaction shows a curvilinear pattern: it decreases after peaking right after newcomers begin. In this regard, socialization researchers have emphasized using the longitudinal research design to explore the continuous and dynamic newcomer socialization process because cross-sectional research may inflate observed relationships between constructs in newcomer socialization (Ashforth et al., 2007; Bauer et al., 2007). Recently, the literature on newcomer socialization is showing growing interest in considering changes over time. For instance, Jokisaari and Nurmi (2009) showed that newcomers perceive a decline in supervisory support over time, and those perceptions are related to decreased role clarity, job satisfaction, and a slower rate of salary increase. Extending that study, Kammeyer-Mueller and colleagues (2013) demonstrated that changes in both supervisor and coworker support and undermining for newcomers are related to various work outcomes such as work proactivity and social integration. Their results especially indicate that initial support and undermining more powerfully predict later work outcomes than do changes in support and undermining over time.

In summary, both theoretical and empirical studies on newcomer socialization have argued and demonstrated the importance of continuous dynamism in socialization processes. However, newcomer socialization scholars have paid little attention to the role of time (Ashforth, 2012). Although a few previous empirical studies showed changes in newcomers' attitudes or behaviors over time, knowledge is still limited regarding whether the speed of socialization matters and, if so, how we can hasten it.

II. Newcomer's Social Networks

a. Egocentric Networks

Egocentric networks refer to "an individual's unique set of social contacts" (Morrison, 2002, p. 1152). They can be defined as "networks consisting of a single actor (ego) together with the actors they are connected to (alters) and all the links among those alters" (Everett & Borgatti, 2005, p. 31). Whereas complete networks look at *all* the ties in a closed population or unit (Marsden, 1990), egocentric networks direct attention to an individual-centered web of contacts with others. Regarding newcomer socialization contexts, newcomers account for only a small part of the whole social structure where they are embedded, so Morrison (2002) argued that egocentric networks are more useful to examine social networks in newcomer socialization. In support, Rollag, Parise, and Cross (2005) found that newcomers are more likely to be located on the periphery of complete social networks even a year after employment. In addition, Louis (1980) argued that newcomers are less likely to be at the center of complete social networks because they can rarely transfer their access to informal information or influence networks to new situations. Hence, rather than focusing on complete networks, I focus on newcomers' egocentric networks in this study.

Workplace networks may have different functions; they may be advice, communication, information, and friendship networks (Klein, Lim, Saltz, & Mayer, 2004). From egocentric networks perspectives, they can be viewed as individuals' social contacts within their organizations for purposes of communicating, getting information, gathering advice, and gaining friendship. In this study, I focus on *communication*

networks. In the next section, I review the roles of social networks in the newcomer socialization context.

b. Social Networks in Newcomer Socialization

The field of newcomer socialization has turned increasing interest to the roles of social networks in newcomer socialization (e.g., Jokisaari & Nurmi, 2009; Jokisaari & Nurmi, 2012; Morrison, 2002; Rollag et al., 2005; Saks et al., 2007; Van Maanen, 1978). As mentioned, this argument is based on the premise that insiders play significant roles in facilitating newcomer socialization processes. In that vein, Wanous (1992) characterized organizational socialization as "the transmission of important norms and values to the newcomer by the insiders in the organization" (p. 194).

Although many researchers have proposed that social networks potentially impact newcomer socialization (Wanous, 1992), empirical knowledge is fairly scant regarding social network roles in the newcomer socialization context. Morrison (2002) conducted the first empirical study exploring social network roles in the newcomer socialization context using a sample of first-year accountants (average tenure of nine months) in three different offices. Although the findings were somewhat unclear, she demonstrated that newcomers' information networks and friendship networks are positively associated with both learning (e.g., organizational knowledge, task mastery, role clarity) and social assimilation (e.g., social integration, organizational commitment). Initially she predicted that information network size and status would be more related to the learning aspect of socialization, but instead found information network size to be positively related to social integration and information network status to be positively related to organizational commitment. She also expected friendship network strength and status to be more related

to social assimilation, but found friendship network strength to be positively associated with role clarity and friendship network status to be positively associated with organizational knowledge. The somewhat unclear findings may have occurred because the two networks somewhat overlap. For instance, people tend to seek advice or information from formal documents (e.g., job descriptions), channels (e.g., formal mentors), and from individuals they consider trustworthy or intimate. However, previous literature has mostly conceded that friendship networks can be conceptually differentiated from other informal social networks (e.g., Brass, 1984; Ibarra, 1995; Morrison, 2002) because they are based on intimacy, trust, and social liking (i.e., affect), rather than task (e.g., Brass et al., 2004; Gibbons, 2004). Besides Morrison (2002), socialization studies covering newcomers' social networks are quite rare.

Although empirical studies on newcomer social networks are still limited, fortunately socialization researchers have recently been earnestly looking at the roles of social networks in newcomer socialization. Fang and colleagues (2011) have conducted recent theoretical work based on the social capital model. They solidly discuss social network roles in newcomer socialization and propose a social capital model of organizational socialization processes in which organizational socialization tactics and newcomer proactivity affect newcomer adjustment and ultimately career success by helping newcomers establish social capital through network structure and resources. Their study makes two valuable contributions. First, unlike previous discussions about newcomers' social networks, they directly and theoretically explore social networks as they potentially affect newcomer socialization. Second, although social networks literature has heavily focused on outcomes (Brass et al., 2004), Fang et al. (2011) suggest

several contextual and individual factors that may be important antecedents for social networks. In addition to Fang et al. (2011), Jokisaari and Nurmi (2012) offered a good framework of how newcomers' social network characteristics can facilitate their socialization over time. Their theoretical model mainly posits that social networks affect newcomer socialization by providing newcomers with access to various resources such as knowledge and sponsorship, and by providing social referents and influence. Both Fang et al. (2011) and Jokisaari and Nurmi (2012) offer promising frameworks for socialization researchers interested in social networks. Simultaneously, they share some common characteristics. First, they treat organizational socialization tactics as an important factor for explaining social network development. Given the limited research on antecedents of social networks (Brass et al., 2004) and recent calls for network studies in newcomer socialization, the two models are groundbreaking in that they connect the two research areas. Second, both studies indicate that social networks allow newcomers to access significant information and social support so that they can utilize insiders' information and social support. Third, beyond typical adjustment variables, both studies propose that an important socialization outcome is career success, such as promotion and increased salary.

In this study, I focus on newcomers' communication networks - their unique set of organizational contacts they seek out for job-related or firm-related information or for discussing job-related problems. Employees must have workplace communication for delivering or exchanging organizational information. For newcomers, communication is especially crucial for reducing their uncertainty and for learning how to behave consistently with organizational goals. Information about performance can be also

"fundamental to reinforcing a sense of competence and believing that one is a valued part of an organization" (Spreitzer, 1995, p. 1447). In other words, in the newcomer socialization context, information delivered through communication with organizational insiders can increase newcomers' self-efficacy, which is positively related to learning, and can help newcomers feel part of their new organization.

I focus on five communication network configurations. Size captures the number of communication ties between newcomers and organizational members. Hierarchical status, range (whether ties are in the same department or come from elsewhere), and density (whether alters know each other) capture diversity of communication ties. Tie strength refers to communication frequency, which can be also characterized as intimacy levels.

c. Social Network Dynamics

Previous social networks literature strongly tends to treat social networks as stable rather than dynamic, perhaps because those studies have mainly focused on consequences rather than antecedents (Brass et al., 2004; Nebus, 2006). Although interest is growing regarding social network dynamics (Kossinets & Watts, 2006), studies on social network dynamics or development are still limited, and most take a structural approach. I do not mean to undermine the benefits of structural approaches for exploring social network dynamics. However, given that newcomers tend to be located at the periphery of social network structure (Louis, 1980; Rollag et al., 2005), the structural approach does not fit well to my purposes in examining newcomers' social network development.

Although limited, a few previous empirical studies provide some ideas to guide this study. First, using a first-year college student sample, Brissette, Scheier, and Carver

(2002) explored the role of optimism to predict friendship network size. Study participants reported the number of close friends, defined as "a person whom respondents reported feeling close to and whom they believed they could confide in and turn to for help" (p. 104), at the beginning and end of the semester. Although the results demonstrated that highly optimistic individuals tended to have larger friendship networks, their optimism did not predict increases in number of friends over one semester. The authors provided two possible reasons for failing to find that optimism significantly predicted increases in friendship network size. First, they measured the number of close friends two weeks after the semester began. Students had probably already developed friendships at the beginning of the semester before they completed the surveys. In addition, when measuring friendship networks, they used five-point scales ranging from 0 (*none*) to 4 (*four or more*) which limits responses regarding the number of friends. Hence, their responses may have been less able to capture the increase in friendship network size. Second, Asendorf and Wilpers (1998) examined a similar question using a first-year college student sample in Germany. Participants were surveyed every three months for 18 months. They reported the number of peers, defined as "persons aged 18-27 years excluding siblings" (p. 1535). Although the authors did not examine the increase in the number of peers reported, they found that extraversion explained the number of peers in the first 12 months but not after 12 months. Third, Hays and Oxley (1986) investigated network development in first-year college students. Respondents answered survey questions every four weeks for the first 12 weeks of the fall semester, and they listed "those whose relationships are particularly enjoyable or worthwhile to (him/her) in some way" (p. 306). The authors found gender differences in social network size development.

Women tended to have larger networks in the beginning, but their networks stayed relatively stable over time. Men had smaller networks initially, but their networks tended to grow over time. In addition, network functions such as emotional support and information varied across gender and living situations, but were also significantly associated with college adjustment.

Those three studies provide a number of implications for this study. First, they demonstrate the advantage of using newcomers as a sample for network development studies. That is, newcomers are less likely to have social ties with insiders before they join organizations (a college or a new class in the three studies), so they serve as a valid sample to explore how people develop social networks over time. Second, newcomers are more than likely to develop their networks, at least in terms of size, over time. However, the size increase is more likely to happen in the beginning and then tend to decrease after a certain time point. Third, network characteristics are likely to facilitate newcomer adjustment. For example, Hays and Oxley (1986) showed that first-year college students' social networks are closely associated with their successful adaptation to college life.

The three studies have their limitations. First, they all used college student samples. Although the study participants were new to the study settings, we do not know whether newcomers in organizations would show similar patterns in developing social networks. Second, we do not know whether certain individual or organizational factors can hasten social network development. That is, although we know a few factors (e.g., optimism) possibly related to social networks development, we do not know whether the factors can also explain or predict the speed of social network development. Last, the role of contextual factors in social network development has received little attention. That is,

we know little about how organizations can either help or hinder newcomers' social network development.

Recently, a noteworthy study explored network churn, "[the] changes in the volume, composition, and patterns of changes in individuals' personal networks" (Sasovova, Mehra, Borgatti, & Schippers, 2010, pp. 640-641). Studying a sample of radiology department employees at a hospital in the Netherlands, Sasovova et al. (2010) surveyed the employees' friendship networks twice, three months before a new information system was adopted and six months after the adoption. Participants used a roster of fellow employees so that they could check those who were "a person you like to spend breaks with, or with whom you like to take part in different social activities" (p. 649). The results showed that employees who reported higher self-monitoring tended to attract more friends over time. In addition, their new friends tended to be from different functions. The findings show promising changes in workplace networks over time. The study also showed that an individual factor (i.e., self-monitoring) significantly explains social network dynamics. Information system change, as a contextual factor, triggered network changes since "such changes provide a window of opportunity for observing the restructuring of social network ties" (p. 648).

Although Sasovova et al.'s (2010) findings are groundbreaking in showing social network development or change over time in an organizational context, the findings diverge from this study context. First, the average organizational tenure was 12.29 years (s.d. = 9.20). Hence, the employees had already interacted and formed social ties with other insiders. In addition, they almost certainly already knew the people they would seek out for information or help. In contrast, the newcomers in this study are likely to be

totally new to almost all the organizational insiders and are less likely to have meaningful social ties with insiders when they first enter the organization. In other words, longstanding employees are already embedded in social networks, but newcomers are in the process of getting embedded. The sample characteristic affects the base rate and restricts the range (Johns, 2006), so newcomers are a unique context for exploring social network development. Second, similar to Asendorpf and Wilpers (1998), Brissette et al. (2002), and Hays and Oxley (1986), Sasovova et al. (2010) did not explore organizational roles in explaining network development. This does not mean to downplay the roles of individual factors. Their findings are valuable in that social networks research has given little attention to human agency (Kilduff & Brass, 2010). However, it is also forward-looking to explore organizational roles because, as field theory suggests (Lewin, 1951), individual behaviors are a function of individuals and their affiliated environments. Third, Sasovova et al. (2010) focused only on friendship networks because, compared with other networks, personality is more likely to play important roles in shaping affect-based networks. However, the literature has well-established that learning, which is highly cognitive, is a key to newcomer socialization. Hence, it seems desirable to explore other network types such as communication networks in newcomer socialization. Last, Sasovova et al. (2010) did not examine whether the changes in individuals' social networks affect their work outcomes. Although they demonstrated changes in the number of structural holes, they did not show that changes in social networks also affect work outcomes.

Chapter 3: Theoretical Framework

I. Socialization Factors and Newcomer's Communication Networks

a. Institutionalized Socialization Tactics

Organizational socialization tactics refer to "the ways in which the *experiences* [italics added] of individuals in transition from one role to another are structured for them by others in the organization" (Van Maanen & Schein, 1979, p. 230). Such tactics can greatly affect newcomers' initial interactions with other organizational members. Regarding development of newcomers' communication networks, institutionalized socialization tactics provide newcomers formal means or structure for connecting with experienced insiders and other newcomers, which is important because newcomers are likely to seek information or discuss job-related problems with experienced insiders rather than with someone outside their organizations. Experienced insiders can also help newcomers make sense of their new organizational environment (e.g., Louis, 1980), which would help them form new social ties with insiders, relieve their anxiety, and give them confidence in interacting with other members. Fang et al. (2011) proposed that institutionalized socialization tactics predict newcomers' network structure and resources by helping them gain "access to social capital" (p. 133). Hence, it is hypothesized that institutionalized socialization tactics experiences are associated with the development of newcomers' communication networks.

First, institutionalized socialization tactics experiences give newcomers opportunities for connecting with more people as sources of communication about job or organization-related issues (size). Second, newcomers go through common set of learning processes after beginning their jobs, so the institutionalized socialization tactics allow

them to know and communicate with people from diverse functions (range) for gathering information or discussing job-related issues. Third, institutionalized socialization tactics help newcomers get advice and guidance from experienced insiders who are more likely to be from the upper echelons (status) of the organization through mentoring or getting advice from experienced insiders. Fourth, institutionalized socialization tactics provide newcomers with frequent and consistent interactions with others over time during the transition stage so they can form strong communication ties (tie strength). Last, institutionalized socialization tactics allow newcomers to connect with insiders from various functions and hierarchies, giving low density to their communication ties.

Institutionalized socialization tactics would be also related to the rapidity of network development. The Matthew Effect (Merton, 1988; 2010) mainly addresses career success issues, but it provides a framework based on a popular phrase derived from the Gospel of Matthew: "the rich get richer and the poor get poorer." That is, differences at beginning points (or intercepts) can trigger cumulative unequal advantages. Applying the Matthew Effect to this study context, newcomers experiencing high institutionalized socialization tactics will have better starting points in terms of communication network size, status, range, tie strength, and density. That is, when organizations provide newcomers with continuous opportunities to connect with many insiders and other newcomers from different and same functions in the organization, they are very likely to establish large (size), diverse (range, status, and density), and strong (tie strength) communication networks. Over time, the differences lead to large discrepancies in size, status, range, tie strength, and density for those who experienced high versus low institutionalized socialization tactics. In other words, newcomers experiencing

institutionalized socialization tactics are likely to have more opportunities to be connected with other experienced organizational members by virtue of their better initial footing and consistent institutionalized socialization experiences. Hence, I expect that newcomers who report greater institutionalized socialization tactics are more likely to develop their communication networks, in terms of size, status, range, strength, and density, faster than others who experience less institutionalized socialization tactics.

> *Hypothesis 1a*: Institutionalized socialization tactics experiences at time 1 will be associated with between-individual differences in newcomers' communication network configurations (size, status, range, tie strength, and density). Specifically, those experiencing greater institutionalized social tactics will have larger (size), more diverse (status, range, and density), and stronger (tie strength) communication networks at time n.

> *Hypothesis 1b*: The greater the institutionalized socialization tactics experienced at time 1, the greater the change in newcomers' communication network configurations (size, status, range, tie strength, and density) will be over time. That is, communication network configurations will have stronger growth trajectories for newcomers who experience greater institutionalized socialization tactics experiences at time 1.

b. Task Interdependence

The seminal job characteristics model (Hackman & Oldham, 1975) argues that five core job dimensions - skill variety, task identity, task significance, autonomy, and feedback - affect employees' psychological states (i.e., experienced meaningfulness of the work, experienced responsibility for work outcomes, and knowledge of actual results of work activities) which, in turn, influence personal and work outcomes such as internal work motivation, work performance, satisfaction with the work, absenteeism, and turnover. The model mainly indicates that the five core job characteristics determine employees' psychological states, work attitudes, and behaviors.

While the job characteristics model has been applied to a wide range of contexts, the socialization literature has given it little attention (Saks & Gruman, 2012). The few studies examining the effects job characteristics using newcomer samples (e.g., Ashforth, Saks, & Lee, 1998; Colarelli, Dean, & Konstans, 1987; Feldman & Weitz, 1990; Katz, 1978) have mainly focused on the five core job characteristics originally proposed by Hackman and Oldham (1975). For instance, using undergraduate business graduate samples over two successive years at a Canadian university, Ashforth et al. (1998) created one additive score for five core job dimensions (i.e., motivating potential score) and demonstrated that newcomers who reported a high motivating potential score tended to be more satisfied with their jobs, show higher organizational identification, and have lower turnover intentions. The motivating potential score was more strongly related to newcomer adjustment than were organizational socialization tactics, especially institutionalized socialization tactics. Although job characteristics are potentially important in the newcomer socialization context, however, the socialization literature has still given job characteristics only scant attention.

When it comes to newcomers' communication network development, task interdependence may act above and beyond the five core job characteristics in the job characteristic model (Hackman & Oldham, 1975). Extending the model, Kinggundy (1981) suggested including task interdependence as a core job characteristic, arguing that task interdependence implies both responsibility for personal work outcomes and requirements to interact with others. Task interdependence falls into a social category reflecting "that work is performed within a broader social environment" (Morgeson & Humphrey, 2006, p. 1323). In other words, task interdependence not only affects

employees' psychological states and work motivation but also helps them become embedded in the broader social and organizational environment. Depending on the required direction of interaction, task interdependence can be either initiated or received. Initiated interdependence refers to "the extent to which work flows from one job to other jobs"; received interdependence indicates "the extent to which a job is affected by work from other jobs" (Morgeson & Humphrey, 2006, p. 1324).

Task interdependence shapes or changes patterns of interpersonal relationships within organizations by giving employees opportunities to interact with others connected through their jobs. In other words, task interdependence can affect who is connected and how that occurs. The effects can be more salient for newcomers because their social contacts are limited in their new workplaces. Therefore, both initiated and received interdependence would help them build and develop their communication networks. Specifically, newcomers who report high task interdependence when they first begin their jobs are very likely to create more communication ties with organizational members (size) because they must interact with others to complete their tasks. In addition, unless they change their jobs or tasks, they continually interact with the same people over time. Hence, newcomers with high task interdependence are more likely to frequently communicate with other organizational members (tie strength). I do not hypothesize relationships between task interdependence and communication network status, range, and density because those relationships can be influenced by task interdependence specific to jobs, tasks, and organizations.

Because task interdependence *consistently* requires newcomers to be connected with insiders, task interdependence would be associated with the speed of newcomers'

social network development and also with where their networks begin. The Matthew Effect can be also applied here. Because task interdependence is hypothesized to be positively related to newcomers' initial communication network configurations (size and tie strength), it would affect the inequality of growth trajectories between those with higher and lower task interdependence. Therefore, I expect that newcomers who report high task interdependence are more likely to develop size and tie strength in their communication networks, faster than those who report lower task interdependence.

> *Hypothesis 2a*: Task interdependence at time 1 will be associated with between-individual differences in newcomers' communication network configurations: those with higher task interdependence will have larger (size) and stronger (tie strength) communication ties at time n.
>
> *Hypothesis 2b*: The higher the task interdependence at time 1, the greater will be the incline in size and tie strength of newcomers' communication network configurations over time: the growth trajectories will be stronger for newcomers with higher task interdependence at time 1.

c. Proactive Personality

Workplace proactivity has been studied with either a personality or behavioral focus (Grant & Ashford, 2008). Similarly, studies on newcomer socialization have focused on either newcomer proactive behaviors or personality. Ashford and Black (1996) proposed seven major types of proactive socialization tactics: information seeking, feedback seeking, job-change negotiating, positive framing, general socializing, building a relationship with one's boss, and networking. Empirical studies provide abundant supporting evidence showing that the more newcomers engage in proactive socialization tactics (i.e., proactive behaviors) the better they achieve higher social integration, role clarity, and job satisfaction (e.g., Ashford & Black, 1996; Ashforth et al., 2007; Wanberg & Kammeyer-Mueller, 2000).

Although most previous socialization literature has focused on the outcomes of newcomers' proactive behaviors, some researchers have directed attention to individual difference factors as antecedents of proactive behaviors. Wanberg and Kammeyer-Mueller (2000) explained that the Big Five personalities affect newcomer socialization: newcomers who are highly extraverted are more likely to engage in proactive socialization tactics such as relationship building and information seeking, and newcomers who are open to experience are more likely to seek information. They found the other three dimensions of the Big Five - neuroticism, agreeableness, and conscientiousness - to be unrelated to proactive socialization behaviors. However, except for openness to experience, the Big Five were significantly related to adjustment variables including social integration, role clarity, job satisfaction, and turnover intention.

Although the Big Five personality traits explain newcomer socialization in several ways, the Big Five model does not fully capture proactive tendencies. Considering that proactivity is so important in newcomer socialization, proactive personality, "a stable disposition to take personal initiative in a broad range of activities and situations" (Seibert, Kraimer, & Crant, 2001, p. 847), may capture proactivity tendencies more directly. Of course, some Big Five personality dimensions also capture proactivity. For instance, Bateman and Crant (1993) showed that proactive personality is positively related to extraversion and conscientiousness but not associated with openness to experience, agreeableness, and neuroticism. Although a recent meta-analysis also showed that proactive personality is somewhat related to extraversion (p = .41), openness to experience (p = .34), conscientiousness (p = .34), and neuroticism (p = -.12) (Fuller & Marler, 2009), proactive personality captures unique variance of several criterion

variables beyond the Big Five personality traits (Crant, 1995; Crant & Bateman, 2000; Fuller & Marler, 2009). That is, proactive personality, as a composite personality trait, captures "conceptually and empirically, some unique element of personality not accounted for by the five-factor model" (Crant & Bateman, 2000, p. 66). Similarly, Major, Turner, and Fletcher (2006) argued that proactive personality is a "composite of Big Five facets" (p. 927) by showing that proactive personality has incremental validity over the Big Five model in explaining motivations to learn.

Considering that proactive socialization tactics are critical for successful socialization, proactive personality can be especially important for newcomers. Although empirical studies have demonstrated that newcomers high in proactive personality are more likely to show higher task mastery, group integration, role clarity, and political knowledge (e.g., D. Chan, 2006; Kammeyer-Mueller & Wanberg, 2003), prior socialization studies have paid scant attention to proactive personality in the newcomer socialization context. Similarly, the social networks literature has paid growing attention to individual differences. However, proactive personality has received only limited attention. For instance, Thompson (2005) showed that individuals high in proactive personality engage more actively in networking behavior, but did not examine whether proactive personality affects social network structure.

Social networks within or across organizations are valuable assets for organizational members. They serve as sources of power in an organization (e.g., Burkhardt & Brass, 1990) and even affect leadership effectiveness (Brass et al., 2004). Social network structure is also associated with individual career success (e.g., Seibert, Kraimer, & Liden, 2001). From the social capital perspective (e.g., Adler & Kwon, 2002),

social capital, "a quality created between people" (Burt, 1997, p. 339), is important in that it provides resources such as information and support that allow individuals to achieve their goals. In the newcomer socialization context, Fang et al. (2011) proposed a social capital model of the organizational socialization process arguing that the socialization process depends on how well newcomers can access and mobilize social capital.

Newcomers who report high proactive personality would be more likely to recognize opportunities and take initiatives to change their environments. However, since they are new to organizations, they lack the information required to take initiatives. Hence, they would try to increase their access to needed resources by developing social networks. In support, Thompson (2005) showed that individuals high in proactive personality more actively engaged in networking behavior and in taking initiative. Similarly, a recent meta-analysis also demonstrated that proactive people engage more actively in networking behaviors (Fuller & Marler, 2009).

Communication networks can serve as important resources for gleaning organizational information. Specifically, newcomers high in proactive personality "seek allies and advocates to support personal initiatives and actively strive to attach themselves to people who occupy positions of influence and power" (Thompson, 2005, p. 1012), so they would allocate their resources to create and develop their communication networks to increase their likelihood of accessing and utilizing their social capital. Hence, newcomers high in proactive personality would more actively seek job- or organization-related information by increasing their information sources, which would then more likely increase the quality and quantity of information. Having various information

sources is critical to ensure variety of information. Strong connections are also desirable because people tend to share more important information with others who are strongly connected with them. Hence, newcomers high in proactive personality are likely to have more communication ties (size) across hierarchical levels (status) and functions (range), which would result in low density. In addition, they are likely to have stronger connections with their communication ties (tie strength).

Similar to Hypotheses 1 and 2, because newcomers high in proactive personality are more likely to pursue networking, proactive personality would be associated with how rapidly newcomers' communication networks are developed and also with their starting point in their networks. Applying the Matthew Effect, because proactive personality is positively related to newcomers' initial social network configurations, it would affect the inequality of growth trajectories. Therefore, I expect that newcomers who report high proactive personality are more likely to rapidly develop their communication ties in terms of size, status, range, tie strength, and density.

> *Hypothesis 3a*: Proactive personality at time 1 will be associated with between-individual differences in newcomers' communication network configuration (size, status, range, tie strength, and density): those with higher proactive personality will have larger (size), more diverse (status, range, and density), and stronger communication (tie strength) networks at time n.

> *Hypothesis 3b*: The higher the proactive personality at time 1, the greater will be the change in newcomers' communication network configurations (size, status, range, tie strength, and density) over time. That is, newcomers' communication network configurations will have stronger growth trajectories for newcomers with higher proactive personality at time 1.

II. Newcomer's Communication Networks and Newcomer Adjustment

Following most socialization studies, I focus on three key adjustment variables - role clarity and task mastery reflecting the learning aspect, and social integration

reflecting social assimilation. Role clarity refers to how well employees know their responsibilities and constraints associated with their positions. Task mastery captures how well they know how to perform their jobs. I chose these two proximal outcomes because communication networks deliver job- and organization-related information. Especially, having interactions and communicating with insiders can help newcomers seek information and learn. Social learning theory (Bandura, 1977) explains that individuals can have a better of sense of organizational norms and climates by observing experienced insiders' behaviors. Hence, newcomers can learn with whom they should be connected as well as the appropriate social actions. Thus, newcomers' communication networks can be conducive to the learning aspect of newcomer socialization. Communication networks can also capture the social assimilation aspect. As newcomers become increasingly embedded in communication networks, they would feel an increasing sense of belongingness and membership. In sum, social integration - a feeling of being part of the immediate group (Morrison, 2002) - will occur as newcomers build their communication networks.

Communication ties are channels for gaining information: more ties (i.e., size) may bring more information. The diversity of communication ties - range, status, and density - indicates information breadth because different department affiliations and hierarchical statuses will convey different types of information. Communication tie strength can contribute to both information diversity and quality. That is, the more frequent the communication, the greater the likelihood of acquiring valuable information. In sum, communication network size will be related to the volume of information; communication network range, status, tie strength, and density will be related to

information diversity and quality. Newcomers benefit from voluminous, diverse, and valuable information in their efforts to reduce their uncertainty and to understand clearly and accurately their roles and tasks. Job descriptions, orientations, or other training programs do not convey all needed information; rather it can be critical for newcomers to acquire additional information through social contacts. I predict that, whereas communication network size, range, status, and tie strength will be positively related to newcomers' role clarity and task mastery, communication network density will be negatively related to role clarity and task mastery.

Over time, the stronger growth of communication network size, range, status, tie strength, and density implies that newcomers are more likely to obtain greater and more valuable resources from their connections. In other words, the stronger growth of communication networks means a greater reduction of uncertainty, leading to higher task mastery and role clarity. Hence, I predict that the growth of communication networks will predict future task mastery and role clarity.

Newcomers' communication networks may be also associated with their social integration. Being a part of communication networks can help them feel assimilated and welcomed. Specifically, the more people newcomers communicate with, the more likely they are to feel included. Communication tie strength may be also positively related to social integration because it indicates the amount of time, emotional intensity, and intimacy of social relationships (Granovetter, 1973). However, communication network range, status, and density may have no or weak relationship with social integration because social integration is more about feeling part of a group and being accepted.

Hence, I hypothesize that only size and tie strength will be positively related with social integration.

Over time, newcomers who have stronger growth in the size and tie strength of their communication networks will be more attached to other organizational members, and they will sooner feel that they are valuable organizational members, which will then contribute to higher social integration. Hence, I predict that the growth of communication network size and tie strength will predict later social integration.

> *Hypothesis 4*: Newcomers' communication network (a) size, (b) range, (c) status, and (d) tie strength at time n will be positively related to role clarity and task mastery at time n, and (e) density at time n will be negatively related to role clarity and task mastery at time n.
>
> *Hypothesis 5*: The growth of newcomers' communication network (a) size, (b) range, (c) status, (d) tie strength, and (e) density will positively predict later role clarity and task mastery at time 3.
>
> *Hypothesis 6*: Newcomers' communication network (a) size and (b) tie strength at time n will be positively related to social integration at time n.
>
> *Hypothesis 7*: The growth of newcomers' communication network (a) size and (b) tie strength will positively predict later social integration at time 3.

III. Mediation Effects of Newcomer's Communication Networks

I predict that newcomers' communication networks will mediate the effects of the socialization factors on adjustment outcomes. Organizational socialization tactics are known to positively influence newcomer adjustment. Specifically, institutionalized socialization tactics provide structured, systematic, and useful organizational information. Hence, newcomers experiencing higher institutionalized socialization tactics will be clearer about their responsibilities and constraints in their new roles (i.e., high role clarity). Supporting this, recent meta-analyses demonstrated that institutionalized socialization tactics are positively related to role clarity (Bauer et al., 2007) and

negatively to role ambiguity (Ashforth et al., 2007). Newcomers experiencing high institutionalized socialization tactics are also more likely to assimilate because they experience shared and common experiences with other insiders and newcomers and have more interactions with them. In addition, they will have higher task mastery because insiders formally trained them before they started their jobs. Supporting this, a meta-analysis showed that institutionalized socialization tactics are positively related to social acceptance and self-efficacy is closely related to task mastery (Bauer et al., 2007).

Newcomers experiencing higher institutionalized socialization tactics are likely to have more frequent interactions with experienced insiders, giving them further access to more valuable organizational information. As such, they may know about sensitive political situations that are implicit in their workgroups or organizations, or about unwritten rules governing behavior. Therefore, I posit that newcomers' communication networks will mediate the effects of institutionalized socialization tactics on adjustment outcomes because institutionalized socialization tactics allow newcomers to build more diverse and stronger communication networks that will then facilitate successful leaning and social integration.

Task interdependence can also facilitate newcomer learning and assimilation. Newcomers who have high task interdependence would have more opportunities to gauge their performance by interacting with others. For instance, fellow employees are more likely to give them feedback about their performance along with other valuable information about their jobs or tasks. In addition, their regular interactions with other organizational members will help them become recognized as insiders rather than as "new" employees. In other words, newcomers who report high task interdependence are

expected to have higher role clarity, task mastery, and social integration. Therefore, I predict that communication networks will mediate the relationships between task interdependence and adjustment outcomes.

Proactive personality is also positively related to newcomer adjustment outcomes. Highly proactive newcomers are more likely to enthusiastically seek out information about their jobs and tasks to gain higher role clarity and task mastery. In addition, people who report having high proactive personalities more actively pursue networking behavior (Thompson, 2005). Because it is so critical for newcomers to introduce themselves to other organizational members and interact with them, highly proactive newcomers are more likely to be well integrated into their workgroups and organizations. In support, Chan and Schmitt (2000) showed that new doctoral students who scored high in proactive personality tended to have higher role clarity, task mastery, and social integration. Kammeyer-Mueller and Wanberg (2000) also found that proactive personality was positively associated with role clarity and group integration for newcomers across seven organizations. Thus, I posit that newcomers' communication networks will mediate the relationships between newcomer proactive personality and adjustment outcomes because highly proactive newcomers will build larger, more diverse, and stronger communication networks to gain access to valuable resources that facilitate their learning and social integration.

> *Hypothesis 8*: Newcomers' communication networks will mediate the relationships between institutionalized socialization tactics and (a) role clarity, (b) task mastery, and (c) social integration.

> *Hypothesis 9*: Newcomers' communication networks will mediate the relationships between task interdependence and (a) role clarity, (b) task mastery, and (c) social integration.

Hypothesis 10: Newcomers' communication networks will mediate the relationships between proactive personality and (a) role clarity, (b) task mastery, and (c) social integration.

IV. Newcomer Adjustment and Newcomer Career Success

The newcomer socialization literature has mainly focused on job-related or organizational outcomes such as organizational commitment, job satisfaction, or performance (for a review, see Saks et al., 2007). Most socialization researchers have attempted to show how well newcomer socialization affects organizational goals such as higher performance or commitment. However, beyond job-related or organizational distal outcomes, successful socialization processes can be also important for newcomers' career success. For instance, if newcomers fail to socialize into their new organizations, they may quit their jobs and have to search for new positions. If they fail to perform their jobs well, they will have increased stress levels and decreased life satisfaction. In contrast, high performance and job satisfaction can bring positive outcomes such as higher salary or promotion opportunities. Hence, I explore career success as a focal outcome of newcomer adjustment.

Career success can be defined as "the positive psychological or work-related outcomes or achievements one accumulates as a result of work experiences" (Seibert, Crant, & Kraimer, 1999, p. 417). Career success can be broadly categorized as being extrinsic (or objective) or intrinsic (or subjective) (e.g., Gattiker & Larwood, 1989; Judge, Cable, Boudreau, & Bretz, 1995; Judge, Higgins, Thoresen, & Barrick, 1999; Ng, Eby, Sorensen, & Feldman, 2005; Seibert et al., 1999; Seibert, Kraimer, & Crant, 2001). Extrinsic career success pertains to "observable career accomplishments that can be reliably judged by others" (Wolff & Moser, 2009, p. 197) such as pay, promotion

(hierarchical position), or occupational prestige. Intrinsic career success pertains to "appraisals by individuals of their career success" (Wolff & Moser, 2009, p. 197) which includes career satisfaction, job satisfaction, or turnover intention. Although extrinsic and intrinsic career success are positively related, a meta-analysis demonstrated that they can be empirically and conceptually distinct as evident in the moderate correlations between the two dimensions (.18 to .30; Ng et al., 2005).

Career success in newcomer socialization contexts can differ from career success as a whole. Although both career success and newcomer socialization studies are mostly based on longitudinal design, career success studies tend to focus on much longer time frames. For instance, Judge, Klinger, and Simon (2010) examined general mental ability in predicting extrinsic career success using the National Longitudinal Survey of Youth (NLSY79), which had a 28-year time period. Similarly, Seibert et al. (2001) used 2-year longitudinal data to examine proactive personality effects on career success. Even studies examining career success in early career stages focused on at least one to three years of employment (e.g., Blickle, Witzki, & Schneider, 2009; De Vos, De Clippeleer, & Dewilde, 2009). One main reason for using data over a long time is that sufficient time is needed to detect career success after employment. Extrinsic career success such as promotion and salary increase can be especially affected by various external factors such as organizational policies, organizational restructuring, and economic downturn. Unlike career success studies, newcomer socialization studies mostly focus on the first year or a bit shorter period of time because they are interested in whether newcomers successfully transition from being outsiders to insiders.

In addition to time length, career success and newcomer socialization studies differ in their subject of interest. Career success studies focus on employees in general, but newcomer socialization studies focus only on organizational newcomers. For instance, career success studies may focus on salary increase even if individuals go to other organizations. In contrast, newcomer socialization studies will consider that action to be turnover, a negative consequence, although the individual may gain a salary increase by changing jobs. Thus, rather than applying the ideas in career success literature, I focus on the potential for extrinsic career success. That is, newcomers' promotability and possibilities for salary increase will indicate extrinsic career success.

When newcomers clearly understand their responsibilities and tasks, they are more likely to perform better. Role clarity and task mastery can help them successfully complete their tasks by giving them clear directions about how to do their jobs. Supporting this argument, a meta-analysis showed that newcomers who report high role clarity perform their jobs better (Bauer et al., 2007). Hence, newcomers who report high task mastery and role clarity are more likely to have promotion and salary increase opportunities. In addition, because they know what they are expected to do, they are more likely to be satisfied progress, and will have a clearer picture of their future career. Furthermore, they will be less likely to quit because they will be confident that they will be successful if they stay. Therefore, I predict that role clarity and task mastery will be positively associated with promotability, recommendations for salary increase, career satisfaction, and career goal clarity, but negatively with turnover intention.

Whereas role clarity and task mastery represent the learning aspect of socialization, social integration implies the assimilation aspect. Social integration is

expected to lower newcomers' turnover intentions. Studies of job embeddedness (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001) indicate that people are less likely to leave when they are linked to others at work. In other words, employees who are highly socially integrated are more likely to be strongly attached to their workgroups and organizations which, in turn, would lower their intention to quit. Role clarity and task mastery can be also related to turnover intention. Newcomers who report high role clarity and task mastery are more likely to perceive high person-job (PJ) and person-organization (PO) fit. As the fit literature has well established, PJ and PO fit perceptions are negatively related to turnover intention (e.g., for a meta-analysis see Kristof-Brown, Zimmerman, & Johnson, 2005).

Adjustment speed may be also related to newcomers' career success; if newcomers adjust rapidly, they will perceive that they can probably succeed if they stay with their current organizations. First, rapid learning may be closely associated with self-efficacy or competence. That is, the faster newcomers learn their new roles and tasks, the more they will believe in their self-efficacy about their career success. Hence, newcomers who learn their new roles and tasks quickly are more likely to be satisfied with their progress and to have a clearer picture of their future career. They are also less likely to leave because they perceive themselves as being valuable and successful organizational members. In other words, the growth of role clarity and task mastery will positively predict career satisfaction and career goal clarity but will negatively predict turnover intention. In addition, as newcomers learn their new roles and tasks quickly, supervisors will recognize that they have potential for significantly contributing to their workgroup and organizational performance. Hence, to retain talented newcomers, supervisors are

likely to give them incentives to stay such as higher salaries or promotions. In sum, the growth of role clarity and task mastery will positively predict later promotability and recommendations for salary increases. Second, the growth of social integration may be also related to turnover intention. When newcomers quickly assimilate to their workgroup and organization, they are more likely to be strongly attached or committed. Thus, I posit that the growth of social integration will negatively predict later turnover intention.

> Hypothesis 11: Newcomers' role clarity at time 3 will be positively associated with (a) promotability, (b) recommendation for salary increase, (c) career goal clarity, (d) career satisfaction, and negatively with (e) turnover intention at time 3.
>
> *Hypothesis 12*: The growth of newcomers' role clarity will positively predict later (a) promotability, (b) recommendation for salary increase, (c) career goal clarity, and (d) career satisfaction but negatively predict (e) turnover intention at time 3.
>
> *Hypothesis 13*: Newcomers' task mastery at time 3 will be positively associated with (a) promotability, (b) recommendation for salary increase, (c) career goal clarity, (d) career satisfaction, and negatively with (e) turnover intention at time 3.
>
> *Hypothesis 14*: The growth of newcomers' task mastery will positively predict later (a) promotability, (b) recommendation for salary increase, (c) career goal clarity, and (d) career satisfaction but negatively predict (e) turnover intention at time 3.
>
> *Hypothesis 15*: Newcomers' social integration at time 3 will be negatively associated with turnover intention at time 3.
>
> *Hypothesis 16*: The growth of newcomers' social integration will negatively predict later turnover intention at time 3.

Chapter 4: Method

I. Participants

The initial pool of potential participants included 795 new hires across all departments or units at a large university located in the Midwestern United States. Potential participants were identified by the organizational new hire data. The university mandates that all newcomers attend a half-day new-employee orientation. To encourage participation, I attended the orientation and gave a short presentation about the study. I also emailed potential participants asking them to complete the first online survey. Following Kammeyer-Mueller et al. (2013), I limited the sample to fulltime employees, excluding new faculty members because they experience unique socialization processes. For instance, they are not required to regularly interact with coworkers or supervisors and usually work independently rather than working in group settings.

Initially, I emailed 795 new hires and persuaded 281 to complete the first survey (initial response rate = 35.35%) in their fourth week after entering the organization. Of the 281 respondents included in the ongoing pool, 254 completed the second survey (ongoing study retention rate = 90.39%) in their sixteenth week, 12 weeks after the first survey. Finally, of the 254 in the ongoing pool, 231 completed the third survey (ongoing study retention rate = 82.21%, overall response rate = 29.06%) in their twenty-eighth week, 12 weeks after the second survey. In this last survey, respondents were also asked to name their supervisors so that I could contact supervisors for additional data. Participants averaged 34.41-years-old (s.d. = 9.75); 73.2% were women, and 82.21% were white. They had an average 11.82 years (s.d. = 9.98) of professional experience, and 49.7% held graduate or professional degrees. They occupied a broad set of occupations,

most commonly administrative specialist, coordinator junior scientist, accountant, and post-doctorate associate.

Of 231 surveyed through all three rounds, 204 provided the requested supervisor information. I then emailed those supervisors and asked them to participate. Of 204 supervisors, 130 completed the survey (supervisor response rate = 63.73%); 71.5% were women; 83.7 % were white; and 54.6% had worked at the university for ten years or longer. Of 231 employees who completed all three surveys, 11 gave insincere responses and were removed from the sample. Hence, the sample for the final analysis included 220 newcomers and 128 supervisors.

II. Timing

A critical part of the research design is to choose the timing of measurement to reveal how long it takes for newcomers to be socialized. Table 2 gives a summary of newcomer socialization and social networks literature research designs for capturing changes over time; most captured newcomer socialization 12 to 18 months following entry. However, Chen (2005) showed that it takes about two months for new hires to be performing adequately, noticeably shorter than the typical 12 to 18 months. His findings are similar to practitioners' books emphasizing the first couple of months of employment in newcomer socialization (e.g., Watkins, 2003). In support, Kammeyer-Mueller et al. (2013) demonstrated that the very early days of employment significantly determine work outcomes; specifically, entry support and undermining were more strongly related to later adjustment outcomes such as social integration and organizational commitment during the first 90 days of employment. However, how long it really takes for newcomers to complete the socialization process is still unclear and seems to depend on affiliation

contexts. How long it takes to develop social networks is also a critical question in this study. Given the limited availability of empirical studies on social network development, I relied on previous studies showing that it takes about six months to see social network changes: Sasovova (2010) and Shah (2000) found significant changes or recovery in social networks in a six-month time frame. Thus I chose approximately the first half year after organizational entry to capture changes in newcomer socialization and social networks.

Second, I had to select the number of time waves and time intervals that are especially critical for exploring the development (or changes) of newcomer adjustment and social networks over time. As Table 2 shows, studies use various time waves, time intervals, and total time lengths. Socialization and social networks studies primarily differ in that social networks studies are more likely to focus on critical events that trigger network structural changes, such as adopting new technologies or systems (e.g., Burkhardt & Brass, 1990; Burkhardt, 1994; Sasovova et al., 2010) or downsizing (e.g., Shah, 2000). No clear alternatives guide the selection of the number of time waves and intervals for capturing changes in social networks and newcomer socialization over time. However, for studying newcomer socialization, researchers have usually administered the first surveys in the early employment phases, perhaps because joining a new organization alone can be a critical event that changes newcomers' attitudes and adaptations to new situations. Ashforth (2012) suggested that capturing changes over time in newcomer socialization contexts requires measuring baseline levels of learning and adjustment variables as early as possible. Therefore, I sent the first survey to the eligible newly hired participants in their fourth week (time 1) after they entered the organization. I chose the

fourth week mainly because it takes a certain amount of time for newcomers to experience and gain a sense of their new organizations. In addition, although two time-wave data collections allow researchers to test whether the variables of interest show significant changes, it is not feasible to test if the variables of interest increase or decline over time. Hence, I collected data using three time-waves with identical time intervals. Specifically, after newcomers completed the first survey, they completed the follow-up online surveys in their sixteenth week (time 2) and twenty-eighth week (time 3).

III. Measures

Control variables and socialization factors were measured at time 1 (week 4). Communication networks and adjustment variables (i.e., role clarity, task mastery, and social integration) were measured at times 1, 2 (week 16), and 3 (week 28). Career success variables and supervisors' surveys were collected at time 3. Table 3 summarizes the list of variables measure at each time wave.

Control Variables

Control variables were assessed in the time 1 survey. I controlled for gender (1 = male; 2 = female) because social interaction patterns may show gender differences (e.g., Brass, 1985). I also controlled for race. Although diversity and socialization have a nearly nil intersection, Kammeyer-Mueller, Livingston, and Liao (2011) demonstrated that newcomers' perceived surface similarity is positively related to their proactive behaviors but not to work outcomes such as role clarity, organizational citizenship behavior, and creativity. In other words, it is highly likely that minority newcomers and majority newcomers experience somewhat different socialization processes. Thus, because participants were predominantly white, I coded whites = 1 and non-whites = 2. I also

controlled for education level: 1 = less than a high school diploma; 2 = high school diploma; 3 = high school diploma plus technical training or apprenticeship; 4 = some college; 5 = college graduate; 6 = some graduate work; 7 = graduate or professional degrees. In addition to basic demographic factors, I controlled for work-related variables. The length of professional work experience in months was controlled because previous work experience can be related to newcomer socialization processes (e.g., Adkins, 1995). I also controlled for whether newcomers were hired through an employee referral program because that can affect newcomers' first footing in their social network development: 1 = referred by an organizational insider; 2 = not referred by an organizational insider.

Socialization Factors

Institutionalized socialization tactics were measured using Jones (1986). Participants answered 30 items about how extensively they experienced different organizational socialization tactics after starting their new jobs. For example, "Experienced organizational members see advising or training newcomers as one of their main job responsibilities in this organization" and "Almost all of my colleagues have been supportive of me personally." One item, "In the last six months, I have been extensively involved with other new recruits in common, job related training activities," explicitly specified a time frame. Because my measure of institutionalized socialization tactics took place in the fourth week, I reworded "in the last six months" to read "since I started this job." The 30 items created a composite score for measuring the institutionalized socialization tactics. That is, high composite scores indicate the institutionalized end of socialization tactics continuum, and low scores reflect the less

institutionalized socialization tactics (i.e., individualized end). Response scales were 1 (*strongly disagree*) to 7 (*strongly agree*).

Task interdependence was measured by six items from Morgeson and Humphrey (2006). Two subscales were used in an analysis, specifically initiated and received interdependence. For example, "The job requires me to accomplish my job before others complete their job" for initiated interdependence, and "The job depends on the work of many different people for its completion" for received interdependence. Response scales were 1 (*strongly disagree*) to 5 (*strongly agree*).

Proactive personality was measured by 10 items from Seibert et al. (1999), the short version of Bateman and Grant (1993). Response scales were 1 (*strongly disagree*) to 7 (*strongly agree*). Example items include "I am constantly on the lookout for new ways to improve my life" and "I can spot a good opportunity long before others can."

Newcomers' Communication Networks

Communication networks were assessed using Marsden's (1990) egocentric method. Participants listed "people at your organization with whom you communicate for job-related or firm-related information or you can discuss job-related problems." They were given enough space to name as many individuals as they wanted. They were asked to provide information about each alter's workgroup (1= same department; 2 = different department), hierarchical status (1 = first year staff; 2 = experienced staff; 3 = senior; 4 = manager), and the average communication frequency (1 = once a week; 2 = twice a week; 3 = three times a week; 4 = four times a week; 5 = daily). To measure density, at the end of the communication networks survey, participants were asked "Do these individuals you listed know each other?" Response was provided from 1 (*none*) to 4 (*all*).

Communication network size was calculated as the total number of alters listed. Range was assessed as the number of different departments represented in the newcomers' communication networks. Status was measured using the average hierarchical level of alters listed. Tie strength was computed by averaging responses to communication frequency. Last, density was measured using the single item described above.

One unique characteristic in this study research design is that participants provided their communication networks information three times. I recognized that they might forget the names they provided earlier and then provide varying lists, so for times 2 and 3 surveys, I provided the list they had given in times 1 and 2, respectively, so that they could add or delete alters if necessary.

Adjustment Variables

Role clarity was measured using six items from Rizzo, House, and Lirtzman (1970). The scale was originally designed to measure role ambiguity, defined as "[a] lack of the necessary information available to a given organizational position" (p. 151). The items are reverse coded (e.g., Kammeyer-Mueller & Wanberg, 2003; Wanberg & Kammeyer-Mueller, 2000). For example, "I know exactly what is expected of me" and "I know that I have divided my time properly." Responses were provided on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Task mastery was measured with four items from Morrison (1993a) and three items from Chao et al.'s (1994) performance proficiency domain. Morrison (2002) added three additional items from Chao et al. (1994) to the original measure to enhance the reliability and to reflect broader aspects of task mastery. Kammeyer-Mueller and Wanberg (2003) also used the same measure. For example, "I am confident about the

adequacy of my job skills and abilities" and "I have learned how to successfully perform my job in an efficient manner." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Social integration was assessed using seven items from Morrison (2002) which "reflect a newcomer's feelings of attachment and inclusion, rather than perceptions about his or her coworkers (such as "my coworkers are friendly) or about the number of friends that the newcomer had" (p. 1154). For example, "I look forward to being with my co-workers each day" and "I feel comfortable around my co-workers." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Career Success Variables

Career goal clarity was measured using five items from Wanberg, Kammeyer-Mueller, and Marchese (2006). For example, "I have a clear picture of my short- and long-term career goals" and "I have a plan for what I need to do to accomplish my career goals." Responses ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Career satisfaction was measured using five items from Greenhaus, Parasuraman, and Wormley (1990). One advantage of this measure is that it assesses satisfaction with current career success and also career progress. For example, "I am satisfied with the success I have achieved in my career" and "I am satisfied with the progress I have made toward meeting my overall career goals." Response scales ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Turnover intention was measured using three items from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Henkins, & Klesh, 1979). For example, "I often think of leaving the organization" and "It is very possible that I will

look for a new job next year." Response scales ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

To measure *promotability*, I surveyed the supervisors using three items from Thacker and Wayne (1995). For example, "I believe that this employee will have a successful career" and "If I had to select a successor for my position, it would be this subordinate." Responses were provided on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Promotablity was also assessed by a single item addressed to newcomers: "My manager would encourage me to apply for a promotion." Response was provided on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Salary increase recommendation was measured following Allen, Russell, and Rush (1994). I asked supervisors whether they would recommend the newcomers for salary increases on a scale ranging from 1 (*would definitely not recommend*) to 7 (*would recommend with confidence and without reservation*).

V. Analysis

For the purpose of this study, it was important to capture the growth of time-varying communication networks and adjustment variables. I first analyzed data using latent growth modeling (LGM; D. Chan & Schmitt, 2000). LGM is an extension of structural equation modeling that enables researchers to analyze changes in the variables of interest and to determine whether the changes are related to other constructs. At least three measurement waves are required to define higher order latent constructs, initial status (i.e., intercept), and change (i.e., slope) of the variables of interest.

Following Chan (1998), I conducted the first phase of analysis to test measurement invariance of the time-varying variables measured three times. Establishing

measurement invariance is a necessary condition to use LGM by ensuring that the same constructs are measured with precision across time. Second, when the assumption of measurement invariance is established, growth trajectories of intra-individual change over time can be modeled using LGM.

Measurement invariance. I performed a series of model comparisons to evaluate measurement invariance for newcomer adjustment variables. Either a single item or count variables measure newcomers' communication networks, so I tested measurement invariance only for newcomer adjustment variables. Specifically, I conducted a measurement invariance test by comparing models with freely estimated factor loadings and those with fixed constrained models equal across three measurement time points. The configural longitudinal invariance model, which served as the baseline for testing measurement invariance, fit the data well (χ^2 [15, N = 220] = 15.17, *n.s.*; CFI = 1.00; TLI = 1.00; RMSEA [90% CI] = .01 [.00, .06]; SRMR = .04). The metric invariance model also yielded acceptable fit to the data as well as the configural longitudinal invariance model (χ^2 [19, N = 220] = 15.72, *n.s.*; CFI = 1.00; TLI = 1.00; RMSEA [90% CI] = .00 [.00, .05]; SRMR = .04). For model comparisons, I followed Cheung and Rensvold's (2002) criteria of Δ CFI (>.01) and Δ TLI (>.02). Comparing CFI and TLI values at two decimal places between the two models did yield any differences, suggesting that newcomer adjustment variables met metric measurement invariance. However, the scalar invariance model failed to fit the data well enough (χ^2 [23, N = 220] = 60.40, $p < .01$; CFI = .96; TLI = .94; RMSEA [90% CI] = .09 [.06, .11]; SRMR = .09). In addition, Δ CFI was .04 which is larger than .01 and Δ TLI was .06 which is also larger than .02. Thus, newcomer adjustment variables met the metric invariance assumption.

Modeling growth rates. To examine the growth trajectories of newcomers' communication networks and adjustment outcomes, I estimated linear models. First, I constructed a model with two growth factors (i.e., intercept and slopes) that estimate a simple linear growth trajectory over three measurement points. I defined the intercept factors as the initial status by setting the coefficients of all variables of interest to 1. I also set the slope factors loadings as 0, 1, and 2, and tested the models using the MPlus 7 (Muthén & Muthén, 2012) and model fit was assessed with chi-square, CFI, TLI, RMSEA, and SRMR.

Chapter 5: Results

The descriptive statistics, reliability coefficients, and correlations are presented in Table 4. Across three time waves, the three socialization factors – institutionalized socialization tactics, proactive personality, and task interdependence – were not significantly correlated with network tie strength and density. Proactive personality was significantly correlated with network range at time 2 (r = .15, p < .05) but not at time 1 (r = .13, *n.s.*) and time 3 (r = .12, *n.s.*). Initiated interdependence was significantly correlated with network size at time 2 (r = .14, p < .05) but not at time 1 (r = .10, *n.s.*) and time 2 (r = .11, *n.s.*). Received interdependence was significantly correlated with network size at time 2 (r = .20, p < .01) and time 3 (r = .20, p < .01), range at time 2 (r = .20, p < .01) and time 3 (r = .17, p < .05), and status at time 2 (r = .14, p < .05) and time 3 (r = .17, p < .05). However, institutionalized socialization tactics were not significantly correlated with any network configurations across time.

Communication networks were significantly correlated with newcomer adjustment outcomes. At time 2, network range was significantly correlated with role clarity (r = .14, p < .05) and task mastery (r = .15, p < .05). At time 3, network size was significantly correlated with role clarity (r = .15, p < .05) and social integration (r = .17, p < .05). Also at time 3, network range was significantly related to role clarity (r = .18, p < .01) and task mastery (r = .14, p < .05), and network status was significantly correlated with task mastery (r = .16, p < .05).

Newcomer adjustment outcomes were significantly and highly correlated with a number of career success variables. At time 3, role clarity was significantly correlated with career goal clarity (r = .59, p < .01), career satisfaction (r = .50, p < .01), turnover

intention (r = -.50, p < .01), and promotability measured by newcomers (r = .36, p < .01). Also at time 3, task mastery was significantly correlated with career goal clarity (r = .30, p < .01), career satisfaction (r = .19, p < .01), turnover intention (r = -.28, p < .01), and promotability answered by newcomers (r = .30, p < .01). Social integration at time 3 was significantly correlated with career goal clarity (r = .37, p < .01), career satisfaction (r = .41, p < .01), turnover intention (r = -.56, p < .01), and promotability answered by newcomers (r = .34, p < .01).

I. Socialization Factors and Newcomer's Communication Networks

Hypotheses 1a, 2a, and 3a predicted that institutionalized socialization tactics, task interdependence, and proactive personality will be positively related to newcomers' communication networks over time. Table 5 shows the hierarchical multiple regression results. Control variables were entered in step 1 and then, in step 2, the three socialization factors – institutionalized socialization tactics, task interdependence, and proactive personality – were entered into the equation. Table 5 shows the step 2 results with R^2 change compared with the step 1 results. Institutionalized socialization tactics negatively but only marginally predicted network range (β = -.14, p < .10) at time 1. Although institutionalized socialization tactics were positively but only marginally related to network density at time 1 (β = .14, p < .10), they failed to yield significant R^2 change. Initiated interdependence did not predict any network configurations across time, but received interdependence was positively related to network size at time 2 (β = .18, p < .05) and time 3 (β = .19, p < .05), and range at time 2 (β = .18, p < .05) and time 3 (β = .19, p < .05). Received interdependence also predicted network status at time 2 (β = .16, p < .10) and time 3 (β = .18, p < .05), but the R^2 change was not significant. Proactive

personality predicted network range but only marginally (β = .12, p < .10) at time 2. Although the three socialization factors had fairly marginal effects on communication networks, Hypotheses 1a, 2a, and 3a were partially supported regarding associations between the three socialization factors and communication networks.

Hypotheses 1b, 2b, and 3b predicted that the greater experience of institutionalized socialization tactics and task interdependence, and highly proactive newcomers will generate quicker communication network development in size, status, range, tie strength, and density. Figure 2 illustrates the changes of newcomers' communication networks in their first twenty-eight weeks after they started their new jobs. Although their communication network size and range increased over time, status, tie strength, and density decreased over time. To test Hypotheses 1b, 2b, and 3b, first we must test whether mean growth rates are significant in communication network configurations. Table 6 shows the parameter estimates of latent growth models for newcomers' communication networks. Mean growth rate implies whether the change is significant and whether the direction is positive or negative. The variance in growth rate is critical because it indicates whether the variables can serve as independent variables predicting the between-subjects differences in slopes. Network size and range were treated as count variables because they were measured by counting the total number of people listed and the total number of outside department members, respectively. LGM models for network range (χ^2 [693 , N = 220] = 886.29, p < .01), status (χ^2 [2, N = 220] = 17.18, p < .01; CFI = .97; TLI = .96; RMSEA [90% CI] = .19 [.11, .27]; SRMR = .17), tie strength (χ^2 [2, N = 220] = 27.08, p < .01; CFI = .92; TLI = .89; RMSEA [90% CI] = .24 [.16, .32]; SRMR = .25), and density (χ^2 [2, N = 220] = 1.99, *n.s.*; CFI = 1.00; TLI

= 1.00; RMSEA[90% CI] = .00 [.00, .13]; SRMR = .09) failed to fit the data adequately. Network size provided an acceptable fit index (χ^2 [994, N = 220] = 970.40, *n.s.*). However, as Table 6 shows, the variance in growth rate was not significant, which means that between-subjects growth showed no meaningful differences over time. Variances in growth rates for status, tie strength, and density were significant. However, as discussed earlier, model fit indices for these three variables were inadequate. The results prohibit testing of Hypotheses 1b, 2b, and 3b, and show that those hypotheses are not supported.

II. Newcomer's Communication Networks and Newcomer Adjustment

Hypotheses 4 through 7 predicted that newcomers' communication networks will be positively related to role clarity and task mastery, and negatively associated with social integration. Hypotheses 4 and 6 predicted positive cross-sectional relationships between communication networks and adjustment variables across time. Table 7 shows the hierarchical multiple regression results. Control variables were entered in step 1 and then, in step 2, communication networks were added to the equation. Table 7 shows the step 2 results with R^2 change compared with the step 1 results. At time 1, none of the communication network configurations was significantly related to role clarity, task mastery, and social integration. However, network tie strength (β = .15, p < .05) and density (β = -.16, p < .05) at time 2 were significantly related to role clarity. At time 3, network size was positively related to social integration (β = .17, p < .05), but the R^2 change was not significant. Also, network range was positively, but only marginally, related to role clarity (β = .15, p < .10) and task mastery (β = .15, p < .10), but not to social integration (β = .01, *n.s.*). In addition, network status was positively related to task mastery (β = .12, p < .10), but not to role clarity (β = .09, *n.s.*) and task mastery (β = .11,

n.s.). Thus, although the relationships between communication networks and newcomer adjustment variables were relatively weak and mostly significant only at times 2 and 3, I found partial support for Hypothesis 4. However, Hypothesis 6 was not supported.

Hypotheses 5 and 7 predicted that the growth of newcomers' communication networks will predict their later adjustment at time 3. Similar to Hypotheses 1b through 3b, it is essential to acquire enough variances in growth rates for communication networks to test Hypotheses 5 and 7. However, as discussed earlier, the results prevent a testing of Hypotheses 5 and 7 and thus they are not supported.

III. Mediation Effect of Newcomer's Communication Networks

Hypotheses 8 through 10 predicted the mediation effects of newcomers' communication networks in the relationships between three socialization factors – institutionalized socialization tactics, task interdependence, and proactive personality – and newcomer adjustment variables – role clarity, task mastery, and social integration. Among many different ways to test mediation effect (for a review, see LeBreton, Wu, & Bing, 2009), I used Baron and Kenny's (1986) method, considered to be one of the most conservative mediation test methods (MacKinnon, Fairchild, & Fritz, 2007).

Three preconditions should be met to establish the mediation effect (Baron & Kenny, 1986). The first precondition specifies that variations in the independent variable should significantly explain variations in the mediator. The second condition states that variations in the independent variable should significantly account for variations in the dependent variable. Third, the mediator should significantly affect the dependent variable when jointly considered with the influence of the independent variable, and the independent variable's effect on the dependent variable should decrease compared with

that in the second condition. Hypotheses 1a, 2a, and 3a tested the first condition regarding the relationships between three socialization factors and communication networks. As discussed earlier, at time 1, institutionalized socialization tactics predicted communication network range. At times 2 and 3, received task interdependence predicted communication network size and range. Last, proactive personality predicted nework range at time 2. The second condition, whether socialization factors affect adjustment variables, was tested using the hierarchical multiple regression. Control variables were entered in step 1 and then, in step 2, socialization factors were entered into the equation. Table 9 shows the step 2 results with R^2 change compared with the step 1 results. As Table 9 shows, at time 1, institutionalized socialization tactics were positively related to role clarity (β = .47, p < .01; β = .35, p < .01; β = .25, p < .01) and social integration (β = .39, p < .01; β = .37, p < .01; β = .22, p < .01) at times 1, 2, and 3. They were also positively but only marginally related to social integration (β = .13, p < .10) at time 2, but not at times 1 and 3. Proactive personality was positively related to role clarity (β = .14, p < .05; β = .13, p < .05; β = .18, p < .01) and task mastery (β = .24, p < .01; β = .19, p < .01; β = .25, p < .01) at times 1, 2, and 3. At time 1, proactive personality was positively associated with social integration (β = .21, p < .01), but not at times 2 and 3. However, both initiated and received task interdependence did not predict the adjustment variables. Thus, only the mediation effects of newcomers' communication network range in the relationship between institutionalized socialization tactics and newcomer adjustment variables (role clarity and social integration) at time 1 were tested.

Table 10 and 11 show the hierarchical multiple regression results for the final condition. As Models 2 and 5 in Table 10 note, institutionalized socialization tactics were

positively related to role clarity (β = .49, p < .01) and social integration (β = .46, p < .01) at time 1. However, as Models 3 and 6 show, network range at time 1 was not a significant predictor for both role clarity (β = .07, *n.s.*) and social integration (β = .05, *n.s.*). In addition, institutionalized socialization tactics had almost identical effects to those in Models 2 and 5 on role clarity and social integration. As Models 2 and 5 in Table 11 shows, proactive personality was positively related to role clarity (β = .21, p < .01) and task mastery (β = .22, p < .01) at time 2. In addition, as Models 3 and 5 notes, whereas network range at time 2 did not predict role clarity (β = .11, *n.s.*) at time 2, it was significantly but only marginally related to task mastery (β = .13, p < .10) at time 2. Simultaneously, the effects of proactive personality on task mastery slightly decreased. Hence, Hypothesis 10 was only marginally supported. However, Hypotheses 8 and 9 were not supported.

IV. Newcomer Adjustment and Newcomer Career Success

Hypotheses 11 through 16 predicted relationships between newcomer adjustment and newcomer career success. Specifically, Hypotheses 11, 13, and 15 predicted cross-sectional relationships between how well newcomers adjust to their jobs and their career success at time 3. Those hypotheses were tested using the hierarchical multiple regression results. Control variables were entered in step 1 and then, in step 2, newcomer adjustment variables were added to the equation. Table 12 shows the step 2 results with R^2 change compared with the step 1 results. Role clarity was positively related to career goal clarity (β = .60, p < .01), career satisfaction (β = .51, p < .01), and promotability measured by newcomers (β = .19, p < .05), and negatively to turnover intention (β = -.35, p < .01). It was also significantly, but only marginally, related to salary increase recommendations (β

= .24, $p < .10$), but the R^2 change was not significant. Task mastery was positively related to career satisfaction ($\beta = .17$, $p < .05$). It was also positively but only marginally related to promotability ($\beta = .15$, $p < .10$) measured by newcomers. Thus, Hypotheses 11 and 13 were partially supported. Last, social integration was negatively related to turnover intention ($\beta = -.38$, $p < .01$). In addition, it was positively related to career satisfaction ($\beta = .19$, $p < .01$) and promotability ($\beta = .17$, $p < .05$) measured by newcomers. Therefore, Hypothesis 16 was supported.

Hypotheses 12, 14, and 16 predicted that the growth of newcomer adjustment variables will predict newcomers' career success at time 3. Similar to the previous growth trajectory hypotheses, it is essential to have enough variances in growth rates with adequate goodness-of-fit indices to test the hypotheses. Figure 3 shows how newcomer adjustment variables changed throughout the first twenty-eight weeks after organizational entry. Whereas role clarity and task mastery increased in the first twenty-eight weeks, social integration showed relatively marginal change over time. LGM models for newcomer role clarity (χ^2 [1, N = 220] = .35, *n.s.*; CFI = 1.00; TLI = 1.00; RMSEA [90% CI] = .00 [.00, .15]; SRMR = .01), task mastery (χ^2 [1, N = 220] = 5.67, $p < .01$; CFI = .98; TLI = .93; RMSEA [90% CI] = .15 [.05, .27]; SRMR = .04), and social integration (χ^2 [1, N = 220] = .72, *n.s.*; CFI = 1.00; TLI = 1.00; RMSEA [90% CI] = .00 [.00, .17]; SRMR = .01) did not fit the data well enough, especially because the 90% confidence interval for RMSEA was so large. For role clarity, for instance, RMSEA was .00 but the 90% confidence interval was .00 and .15. RMSEA for task mastery was .15 and the 90% confidence interval was .05 and .27. For social integration, RMSEA was .00 but the 90% confidence interval ranged from .00 and .17. Table 8 shows the parameter estimates of

latent growth models for newcomer adjustment variables. Although the variances were significant in growth rate for social integration, as mentioned earlier, the LGM models did not yield acceptable fit indices. Those results do not allow Hypotheses 12, 14, and 16 to be tested, so they are not supported.

V. Post Hoc Analysis

I tested whether newcomer adjustment can mediate the relationships between socialization factors and newcomer career success. Following Baron and Kenny (1986), Table 9 shows the testing of the first condition. Control variables were entered in step 1 and then, in step 2, socialization factors were added to the equation. Table 9 shows the step 2 results with R^2 change compared with the step 1 results. Institutionalized socialization tactics were consistently and positively related to role clarity at time 1 (β = .47, p < .01), time 2 (β = .35, p < .01), and time 3 (β = .25, p < .01), and social integration at time 1 (β = .39, p < .01), time 2 (β = .37, p < .01), and time 3 (β = .22, p < .01). They were also positively, but only marginally, related to task mastery (β = .13, p < .10) at time 2. Proactive personality was positively related to role clarity at time 1 (β = .14, p < .05), time 2 (β = .13, p < .05), and time 3 (β = .18, p < .01), and task mastery at time 1 (β = .24, p < .01), time 2 (β = .19, p < .01), and time 3 (β = .25, p < .01). Proactive personality was also positively related to social integration (β = .21, p < .01) but only at time 1. However, both initiated and received interdependence failed to predict newcomer adjustment variables.

Table 13 shows testing of the second condition. Control variables were entered in step 1 and then, in step 2, socialization factors were added. Table 13 shows the step 2 results with R^2 change compared with the step 1 results. As Table 13 shows,

institutionalized socialization tactics predicted career success including career goal clarity (β = .16, p < .05), career satisfaction (β = .24, p < .01), turnover intention (β = -.21, p < .01), promotability (β = .25, p < .01) measured by newcomers, and supervisors' salary increase recommendations (β = .22, p < .05). Received interdependence was not significantly related to the career success variables, but initiated interdependence was significantly but only marginally related to turnover intention (β = -.16, p < .10). Proactive personality was significantly related to career goal clarity (β = .25, p < .01) at time 1, but not to other career success variables.

To test the final condition, I ran separate hierarchical multiple regressions for institutionalized socialization tactics and proactive personality. Table 14 shows the results of hierarchical multiple regressions. I tested whether the adjustment variables at time 2 mediate the relationships between socialization factors measured at time 1 and career success measured at time 3. For *career goal clarity*, as Model 2 notes, institutionalized socialization tactics were significantly related to career goal clarity (β = .21, p < .01). As Models 3, 4, and 5 show, role clarity (β = .38, p < .01), task mastery (β = .17, p < .05), and social integration (β = .18, p < .05) were significantly related to career goal clarity. Compared with Model 2, institutionalized socialization tactics had either non-significant or decreased effects on career goal clarity. For *career satisfaction*, as Model 8 shows, institutionalized socialization tactics significantly predicted career satisfaction (β = .28, p < .01). As Models 9, 10, and 11 report, role clarity (β = .33, p < .01), task mastery (β = .13, p < .10), and social integration (β = .20, p < .01) were significantly related to career satisfaction. Simultaneously, compared with Model 8, institutionalized socialization tactics had decreased effects on career satisfaction. For

turnover intention, as Model 14 reports, institutionalized socialization tactics were negatively related to turnover intention (β = -.25, p < .01). As Models 15, 16, and 17 note, role clarity (β = -.42, p < .01), task mastery (β = -.26, p < .01), and social integration (β = -.39, p < .01) were significantly related to turnover intention. In addition, institutionalized socialization tactics had non-significant or decreased effects on turnover intention. As Model 20 shows, for *promotability* measured by newcomers, institutionalized socialization tactics were positively related to promotabilty (β = .27, p < .01). As Models 21, 22, and 23 note, role clarity (β = .16, p < .05), task mastery (β = .21, p < .01), and social integration (β = .16, p < .05) significantly predicted promotability. Simultaneously, institutionalized socialization tactics had decreased effects on promotability. Last, as Model 26 shows, for *salary increase recommendation*, institutionalized socialization tactics were positively associated with supervisors' salary increase recommendations (β = .24, p < .10). However, as Models 27, 28, and 29 report, role clarity (β = .00, *n.s.*), task mastery (β = .03, *n.s.*), and social integration (β = -.08, *n.s.*) failed to predict supervisors' salary increase recommendations.

Table 15 shows the hierarchical multiple regression results regarding whether role clarity and task mastery mediate the relationship between proactive personality and career goal clarity. As Model 2 shows, proactive personality significantly predicted career goal clarity (β = .28, p < .01). As Models 3 and 4 report, both role clarity (β = .36, p < .01) and task mastery (β = .15, p < .05) were positively related to career goal clarity. In addition, compared with Model 2, proactive personality had decreased effects on career goal clarity.

In summary, the results provide support showing that newcomer adjustment - specifically, role clarity, task mastery, and social integration - mediates the relationships between institutionalized socialization factors and newcomer career success in the forms of career goal clarity, career satisfaction, turnover intention, and promotability measured by newcomers. Also, task mastery and role clarity mediate the relationship between proactive personality and career goal clarity.

Chapter 6: Discussion

I. Brief Recap of Study Findings

Previous studies on newcomer socialization have shown that organizational insiders play key roles in facilitating newcomer socialization processes by serving as information sources and by providing social support for newcomers. Despite the extensive knowledge regarding the importance of interactions and relationships between newcomers and organizational insiders, we know little about how newcomers form and develop social relationships after they enter organizations. In addition, newcomer socialization is purported to be dynamic, involving incremental changes in experiences, learning, and adjustments over time. However, the socialization literature provides little insight into the forces of time. Hence, I study how newcomers develop communication networks over time, and the role that this aspect of the newcomer socialization process may facilitate newcomer adjustment and career success in the workplace.

First, I find weak but partial support for the proposition that three socialization factors – institutionalized socialization tactics, task interdependence, and proactive personality – will predict newcomers' communication networks. Figure 2 shows that newcomers' communication networks change over time in size, range, status, tie strength, and density, although I fail to find enough variances in growth rates or adequate goodness-of-fit indices, at least in this study sample. Second, I find results showing that newcomers' communication networks facilitate their adjustment but only at time 2 (week 16) and time 3 (week 28). Similarly, although adjustment variables change over time (see Figure 3), I fail to find enough variances in growth rates or adequate goodness-of-fit indices for the growth models. Third, whereas I find no support for the mediation effects

of newcomers' communication networks on the relationships between two socialization factors – institutionalized socialization tactics and task interdependence – and newcomer adjustment, the mediation effects of newcomers' communication networks on the relationships between proactive personality and adjustment variables was marginally supported. Although I did not hypothesize that newcomer adjustment will mediate relationships between socialization factors and newcomer career success, the post hoc analysis results show that to be the case. Last, I find that adjustment to jobs and organizations is positively related to career success. Especially, role clarity most strongly and consistently predicts newcomer career success variables.

In the following sections, I highlight the theoretical implications for those findings and show how newcomers and managers can use these findings to facilitate newcomer socialization processes. I also discuss limitations for this study and future research directions.

II. Theoretical Contributions

First contribution to theory in this study is that I explore potential antecedents of newcomers' social networks. The results suggest that theories of newcomer socialization and social networks should consider received interdependence as a core job characteristic that will affect whether newcomers will have large and diverse communication networks. A few socialization studies have examined job characteristics (e.g., Ashforth et al., 1998; Colarelli et al., 1987; Feldman & Weitz, 1990; Katz, 1978; Saks & Gruman, 2012), but they focused mostly on five core job characteristics – skill variety, task identity, task significance, autonomy, and feedback – originally proposed by Hackman and Oldham (1975). Thus, I add one unique job characteristic to that line of research – task

interdependence – which can affect the development of newcomers' communication networks. I also answer the call for investigating the predictors of newcomers' social network structure in the context of newcomer socialization (Morrison, 2002). Given that organizational socialization tactics are generally the strongest predictor for newcomer adjustment (for a review, see a meta-analysis by Saks et al., 2007), I find that institutionalized socialization tactics only minimally affected newcomers' communication networks. I suggest two possible reasons. First, newcomers may need much longer time to clearly understand socialization programs in their new organizations. I measure the institutionalized socialization tactics in their fourth week as new employees. I drew my data from an organization that has a one-year onboarding program in which they hold training sessions and modules throughout the first year. Thus when participants completed the first survey regarding their institutionalized socialization experiences, they had probably not yet started or had just begun participating in the programs. Second, the composite scale of institutionalized socialization tactics might have failed to adequately capture the specific facets of organizational socialization tactics helping newcomers generate their communication networks. Although most previous socialization studies have used Jones's (1986) inventory to measure organizational socialization tactics, several studies have questioned its validity and reliability (Saks et al., 2007). Recently, Saks and Gruman (2012) argued that we must focus on specific activities or events rather than looking at the whole structure of socialization tactics.

Although proactive personality is significantly related to newcomer adjustment variables, proactivity shows only marginal effects on newcomers' communication networks, which is somewhat contrary to a recent meta-analysis (Fuller & Marler, 2009)

showing that proactive individuals are more likely to engage in networking behavior to derive social network benefits. I suggest two possible reasons for the contradiction. First, the measure of proactive personality captures how people discover new ways or initiate voluntary actions rather than capturing their attempts or ability to build and maintain relationships. Thus, although the meta-analysis showed proactive personality to be positively related with networking behavior, for my purposes, it might be more appropriate to look at newcomers' networking behaviors and observe how well the behaviors help them develop communication networks. Second, proactive personality may fail to apply in situations that have too many uncertainties. For instance, newcomers who seek information from other organizational members may incur social costs, "appearing incompetent in the eyes of one's supervisors and/or coworkers" (Jex & Britt, 2008, p. 80). Hence, although previous socialization studies have shown that newcomers frequently use their coworkers and supervisors to acquire information (e.g., Allen et al., 1999; Morrison, 1993b; Nelson & Quick, 1991; Ostroff & Kozlowski, 1992), proactive newcomers may rely more on alternatives, such as web surfing, to seek the information they need.

When listing their communication networks, newcomers most often listed organizational members from the same department, at an average of 89% in time 1, 83.79% in time 2, and 80.13% in time 3. This result implies that newcomers acquire most necessary job- and firm-related information by interacting with others affiliated with the same department. In support, previous studies have shown that, in general, employees are inclined to discuss and solve work problems mainly with others in the same unit (e.g., Burt, 2004; Zhou, Shin, Brass, Choi, & Zhang, 2009), which illustrates that same group

members or the group as a whole greatly impact newcomer adjustment. Previous theoretical organizational socialization models have only implicitly discussed the roles of groups in newcomer socialization processes (e.g., Feldman, 1981; Kammeyer-Mueller, 2007; Saks & Ashforth, 1997). Instead, the separate group socialization literature has been the major line for discussing newcomer socialization roles (Moreland & Levine, 1982; Moreland & Levine, 2001; Moreland & Levine, 2002), recognizing that teams are more influential than organizations for affecting employees and evoking their commitment (Moreland & Levine, 2001). A few empirical studies on newcomer socialization also indicate that groups and group members are critical in socialization processes. For instance, Chen (2005) showed that team-level expectations about newcomers predict their performance. Similarly, Jokisaari and Nurmi (2009) and Kammeyer-Mueller (2013) demonstrated that supervisor and coworker support relate to newcomer adjustment. Yet, in general, socialization researchers have rarely investigated how newcomers' groups and group members affect socialization processes.

Second, this study shows that newcomers' communication networks can facilitate their adjustment, but diversity and strength in relationship configurations matter more than the number of relationships. Rather than having numerous relationships, newcomers gain better role clarity and task mastery if their relationships span different areas and hierarchical levels and if their communications with insiders occur more frequently. The positive relationships between communication networks and adjustment are somewhat consistent with Morrison (2002) who found positive relationships between information / friendship networks and newcomer adjustment. A major shortcoming in Morrison (2002) is that its cross-sectional research design prevented the researcher from inferring

causality between social networks and adjustment. In addition, the sample had an average of nine-month tenure when measuring social networks characteristics. Thus current study, in contrast, uses a longitudinal research design to add to knowledge about how connections between newcomers and organizational insiders affect adjustment. Specifically, I uniquely examine whether newcomers benefit from their communication networks across three different time points within their first twenty-eight weeks. The results show that newcomers benefits in their sixteenth and twenty-eighth weeks, but not in their fourth week. Thus newcomers probably need a certain amount of time before they can utilize their newly developed communication networks. In other words, they may benefit from the information or resources they derive from social networks, but that may occur sometime after they began their new jobs. In support, Morrison (1993a) found that information-seeking behaviors are positively related to task mastery and role clarity when newcomers reach their sixth month.

Third, this study extends previous socialization literature by incorporating newcomer career success as the distal outcomes of successful adjustment. The results clearly show that successful adjustment enhances newcomer career success at least at the beginning of their organizational lives. Specifically, newcomers who report high role clarity, task mastery, and social integration are more likely to report higher intrinsic career success. Most previous socialization theories have focused mostly on traditional newcomer adjustment outcomes only, such as role clarity, task mastery, and social integration. Although those learning and social assimilation outcomes are critical for newcomers transitioning into a new organization, we must also explore whether they benefit from successful socialization beyond the novice phase. In a theoretical model,

Fang et al. (2011) also proposed that newcomers' adjustment can subsequently contribute to their career success, but empirical studies testing the proposition are still rare.

Newcomer adjustment has almost no significant relationship with supervisors' estimates that newcomers have potential for extrinsic career success (i.e., promotion and salary increase), possibly because supervisors need more time to evaluate their new employees precisely. Previous studies on early career success (e.g., Blickle et al., 2009; De Vos et al., 2009) also looked at the first two or three years to examine the effects of variables of interest on career success variables, especially extrinsic career success. Although I asked supervisors about whether they would willingly recommend newcomers for salary increases and about their perceptions regarding newcomers' promotablity, the results fail to show significant relationships between newcomer adjustment and extrinsic career success. However, newcomers who adjust well to their jobs and organizations then have high expectations about their own promotability, which implies that successful socialization helps them see their potential as successful insiders in the near future.

This study also extends the career success literature by exploring organizations' potential roles in newcomers' career success through institutionalized socialization tactics. Achieving early career success can predict later career success by giving newcomers organizational career sponsorship, supervisor support, training and skill development opportunities, and organizational resources which predicts an individual's later career success (Ng et al., 2005). Although I did not hypothesize institutionalized socialization effects in the model, the post hoc analysis clearly shows that newcomers who experience institutionalized socialization are more likely to report higher extrinsic and intrinsic career success: supervisors are more likely to recommend the newcomers for salary

increase, and the newcomers perceive that they have higher career goal clarity, career satisfaction, promotability, and lower turnover intentions. I also find that newcomer adjustment mediates the effects of socialization factors, especially institutionalized socialization tactics and proactive personality, on newcomer career success. Thus, integrating the socialization literature into the model would benefit future career success research focusing on early career stages.

Last, although growth rates across subjects lacked sufficient variance, and goodness-of-fit indices were inadequate, this study provides preliminary results showing that newcomers develop their communication networks over time. Previous studies on social networks have paid little attention to social network development in the context of time passing. The few empirical studies looking at changes in newcomers' social networks (e.g., Asendorpf & Wilpers, 1998; Brissette et al., 2002; Hays & Oxley, 1986) have focused on whether they vary significantly at different time points, rather than looking at growth or change patterns. The preliminary results in this study, in contrast, clearly show possible patterns in how employees, especially newcomers, change or develop their social networks over time.

III. Practical Implications

Organizations, aware that newcomer socialization may be primary for future organizational life, invest significant resources to facilitate newcomer adjustment, but often fail to fully understand how to accomplish the goal. The results from this study suggest that managers can design more effective onboarding programs by recognizing that job design is paramount for helping newcomers develop social networks. That is, assigning newcomers tasks with high received interdependence can help them connect

with others. Especially in the newcomer socialization context, management should emphasize social characteristics such as social support, interdependence, and feedback (Morgeson & Humphrey, 2006) when designing newcomers' jobs in their early organizational lives.

Second, organizations must design long-term plans for onboarding program effectiveness. Even about six months after newcomers begin, they are still learning about their jobs and organizations. Thus, newcomers may still need consistent organizational and insider support throughout the whole socialization phase. However, about 85% of organizations conduct onboarding programs for less than three months (Society for Human Resource Management, 2011).

Third, organizations must help newcomers develop their communication networks. Although this study provides fairly limited results, it still shows that communication networks help newcomers adjust better. The need can be more salient in some industries where communication with other organizational members is critical to organizational performance. Hence, managers must help newcomers better understand the social structure so that they can easily identify who can help them adjust successfully.

Fourth, newcomers and organizations must both recognize that successful socialization facilitates career success. From a newcomer's perspective, successful socialization can generate both intrinsic and extrinsic career success. From an organization's perspective, career success is also critical because newcomers' personal success ultimately enhances organizational performance. Thus, to retain top talent, organizations should invest more resources to design onboarding programs that enhance career success as well as adjustment.

IV. Limitations and Future Research Directions

This study has its limitations. First, newcomers' communication networks may have nonlinear patterns over time. The size of communication networks in time 1 (week 4) was 5.15 (s.d. = 3.29). The networks then showed 1.47 size increases in time 1 (week 4) versus time 2 (week 16) and 1.57 increases in time 2 (week 16) versus time 3 (week 28). This result implies that newcomers develop their communication networks rapidly and very early in their first month. That is, the growth of communication network size may be more logarithmic or curvilinear-shaped. However, the data prevented me from testing that possibility because I measured communication networks after the first month of employment. Similarly, although Brissette et al. (2002) sampled college students rather than organizational employees, they argued that students are likely to develop relationships as soon as the new semester begins. Brissette et al.'s (2002) argument is also consistent with Ashforth (2012) who argued that we must measure the variables of interest as early as possible to establish baselines for capturing changes over time in newcomer socialization contexts. Hence, future research focusing on newcomers' social networks development or change may need to capture social networks from the very beginning.

Second, extending the first point, I gathered data only three times. The three collections may be insufficient to test the exact change patterns in newcomers' communication networks and adjustment. Thus, future research looking at dynamics in newcomer socialization processes or social network development could incorporate multiple time-wave data. For instance, Kammeyer-Mueller et al. (2013) gathered data in

fourteen time-waves and found insiders' support and newcomers' work outcomes to have nonlinear patterns.

Third, the proposed research model may be more suitable for college graduates. In this current study, most new hires already had sufficient professional work experiences that might have taught them how to find needed contacts and what strategies would be best for developing and managing workplace relationships. In addition, they probably already possessed the skills and expertise they needed to successfully perform their jobs, which could have lessened the possible effects of socialization factors in facilitating their social networks development. Similarly, previous empirical studies looking at newcomers' social network changes also used either college students or college graduates (e.g., Asendorpf & Wilpers, 1998; Brissette et al., 2002; Hays & Oxley, 1986). Therefore, it is likely that the effects of socialization factors on newcomers' social network growth could be more salient for college graduate samples.

Last, the newcomers' communication networks present a methodological challenge; they are all self-reported. Compared with complete networks, egocentric network approaches have a major shortcoming: the possibility of single source bias. Only egos report their contacts within their social networks, so the reliability might be questionable. Density measures can be also problematic. Density is generally measured as the proportion of actual links between an ego's contacts to the total number of possible ties (e.g., Ibarra, 1995; Morrison, 2002). However, I used a single item asking newcomers their overall perceptions about how well their contacts know each other, which raises questions about the validity of the density measure in this study. Thus, future research is needed to capture newcomers' social networks more precisely.

In addition to the communication networks measure, another methodological issue is that newcomers reported most variables, except for promotability and salary increase recommendations, which raises a question of potential common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, attitudes are not necessarily related to behaviors (Fishbein & Ajzen, 1975), and the newcomer socialization field generally accepts using self-reported measures for newcomer learning and assimilation (Bauer, Morrison, & Callister, 1998). It is also unclear whether newcomers have implicit theories about the relationships between their social network structure and adjustment (Morrison, 2002). Thus, the use of self-report scales would not necessarily be problematic. However, future research could examine how supervisors' or coworkers' perceptions of newcomer adjustment change over time and whether their perceptions correspond with adjustments measured by newcomers.

Although the study results fail to fully support the proposed research model, a number of suggestions surface for future research. First, it would be intriguing to examine how newcomers identify which insiders they should interact with. The theory of advice network generation (Nebus, 2006) argues that people follow decision-making processes when forming advice networks. That is, generating social networks can be more about their choices regarding the best contacts for acquiring information. Hence, future research should examine the same research questions using a decision-making perspective to learn how organizations or organizational insiders can facilitate the process.

Second, future research should explore new antecedents of newcomers' social network development. For instance, future research might examine how newcomers' self-monitoring, "an individual's ability to adjust his or her behavior to external and

situational factors" (Robbins & Judge, 2009, p. 147), affects their social network development. Newcomers with high self-monitoring may be more adaptive and eager to develop and manage their social ties with other organizational members. For instance, employees who report high self-monitoring are very likely to attract more friends over time, and their new friends tend to be affiliated with various functions rather than with the same department (Sasovova et al., 2010). In addition, high self-monitors are more likely to occupy brokerage positions (Oh & Kilduff, 2008) and central positions (Mehra, Kilduff, & Brass, 2001) in their social structure.

Third, future research can use a complete approach to examine newcomers' social network development. That is, by looking at how newcomers change positions, such as centrality, in networks over time, we can see whether successful newcomers are more likely to gain better positions in the social structure that lead to better work outcomes. However, for this, beyond the socialization phase, it seems necessary to track newcomers for a much longer time. For example, Rollag and his colleagues (2005) found that even one year after employment, newcomers are more likely to be located at the periphery of complete social networks.

Similarly, to capture more precisely whether successful socialization affects career success, especially extrinsic career success, future research should track newcomers for a longer time. Beyond career success in current organizations, we should determine whether successful socialization experiences enhance careers even after employees change their jobs. For instance, future research can study whether employees who experienced successful socialization in their previous organizations carry that success to a new workplace.

Table 1

Organizational Socialization Tactics Dimensions

	Institutionalized		*Individualized*
Context Tactics Learning task requirements, as part of a group and having formal training before starting the actual job	*Collective* "the tactics of taking a group of recruits who are facing a given boundary passage and putting them through a common set of experiences together"	vs.	*Individual* "the tactic of processing recruits singly and in isolation from one another through a more or less unique set of experiences"
	Formal "those processes in which a newcomer is more or less segregated from regular organizational members while being put through a set of experiences tailored explicitly for the newcomer"	vs.	*Informal* "[it] do[es] not distinguish the newcomer's role specifically, nor is there an effort an made in such programs to rigidly differentiate the recruit from the other more experienced organizational members"
Content Tactics Clear stages exist for training, and there is a clear timetable for role adjustment	*Sequential* "the degree to which the organization or occupation specifies a given sequence of discrete and identifiable steps leading to the target role"	vs.	*Random* "[it] occurs when the sequence of steps leading to the target role is unknown, ambiguous, or continually changing"
	Fixed "[it] provide[s] a recruit with the precise knowledge of the time it will take to complete a given passage"	vs.	*Variable* "[it] give[s] a recruit few clues as to when to expect a given boundary passage"
Social Tactics Receiving positive feedback and identity affirmation from organizational insider to guide them within the organization	*Serial* "one in which experienced members of the organization groom newcomers who are about to assume similar kinds of positions in the organization"	vs.	*Disjunctive* "when newcomers are not following the footsteps of immediate or recent predecessors, and when no role models are available to recruits to inform them as to how they are to proceed in the new role"
	Investiture "[it] ratif[ies] and document[s] for recruits the viability and usefulness of those personal characteristics they bring with them to the organization"	vs.	*Divestiture* "[it] seek[s] to deny and strip away certain personal characteristics of a recruit"

Adapted from Bauer et al. (2007, p.708), Jones (1986, p. 263), and Van Maanen and Schein (1979, pp. 232-251)

Table 2

Research Design for Changes in Newcomer Socialization and Social Networks Literature

	Study	Number of Waves	Time 1	Time Interval	Total Length
Socialization	Boswell et al. (2009)	4	1st day of employment (during an orientation)	3 months (T1 & T2, T2 & T3) 6 months (T3 & T4)	1 Year
	Chan & Schmitt (2000)	4	End of the 1st month	1 month	4 months
	Lance et al. (2000)	3	1st day of employment (during an orientation)	3 months	6 months
	Jokisaari & Nurmi (2009)	4	6 months after graduation	6 months	2 Years
	Kammeyer-Mueller et al. (2013)	14	Within the first 2 weeks of employment	1 week	3 months
Social Networks	Asendorf & Wilpers (1998)	4	2nd week after a new semester	6 months	18 months
	Brissette et al. (2002)	2	During the first 3 weeks in a new semester	End of semester (12-16 weeks)	1 semester
	Burkhardt (1994)	3	3 months before adapting a new computer system	6 months (T1 &T2) 1 year (T2 & T3)	1.5 year
	Burkhardt & Brass (1990)	4	3 months before adapting a new computer system	6 months (T1 & T2) 3 months (T2 & T3) 3 months (T3 & T4)	1 year
	Sasovova et al. (2010)	2	3 months before a new information system	9 months	9 months
	Shah (2000)	1	6 months after layoff	n.a.	n.a.

Table 3

List of Variables Measured at Each Time Wave

	Variables	Time 1 (Week 4)	Time 2 (Week 16)	Time 3 (Week 28)
Control	Demographics (age, gender, race)	O		
	Education	O		
	Professional work experience	O		
	Referral program	O		
Socialization Factors	Institutionalized socialization tactics	O		
	Task interdependence	O		
	Proactive personality	O		
Networks	Communication networks	O	O	O
Adjustment	Role clarity	O	O	O
	Task mastery	O	O	O
	Social integration	O	O	O
Career Success	Career goal clarity			O
	Career satisfaction			O
	Turnover intention			O
	Promotability (supervisor and new employees)			O
	Recommendation for salary increase (supervisor)			O

Table 4

Descriptive Statistics, Reliability Coefficients, and Correlations

	Variables	M	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Institutionalized tactics	4.38	0.69	**.86**												
2.	Proactive personality	5.08	0.81	.23**	**.90**											
3.	Initiated interdependence	3.38	1.02	.11	.09	**.90**										
4.	Received interdependence	3.58	0.92	.14*	.03	.55**	**.83**									
5.	Size, time 1	5.15	3.29	.04	.05	.10	.13	***n.a.***								
6.	Size, time 2	6.97	4.32	.08	.02	.14*	.20**	.81**	***n.a.***							
7.	Size, time 3	8.54	5.45	.11	.04	.11	.20**	.63**	.81**	***n.a.***						
8.	Range, time 1	0.66	1.49	-.05	.13	.12	.08	.54**	.39**	.23**	***n.a.***					
9.	Range, time 2	1.30	2.17	.07	.15*	.13	.20**	.42**	.54**	.41**	.74**	***n.a.***				
10.	Range, time 3	1.97	3.23	.05	.12	.06	.17*	.26**	.39**	.54**	.46**	.74**	***n.a.***			
11.	Status, time 1	2.60	0.61	.01	.06	-.02	.03	-.21**	-.21**	-.16*	.00	-.04	-.03	***n.a.***		
12.	Status, time 2	2.53	0.57	.01	.09	.10	.14*	-.14*	-.14*	-.10	.03	.04	-.01	.66**	***n.a.***	
13.	Status, time 3	2.48	0.54	.03	.01	.10	.17*	-.11	-.09	-.08	.02	.06	.00	.57**	.91**	***n.a.***
14.	Tie strength, time 1	4.19	0.74	.11	.06	.09	.08	-.12	-.10	-.05	-.12	-.04	.03	.34**	.13	.11
15.	Tie strength, time 2	3.91	0.80	.10	.02	-.01	.00	-.14*	-.15*	-.12	-.07	-.06	.00	.09	.27**	.27**
16.	Tie strength, time 3	3.77	0.81	.07	-.01	.05	.00	-.07	-.10	-.19**	-.04	-.06	-.13*	.06	.23**	.21**
17.	Density, time 1	3.81	0.55	.12	.04	.04	.05	-.11	-.13	-.06	-.17*	-.15*	-.04	.30**	-.05	-.06
18.	Density, time 2	3.66	0.62	.05	.05	.06	.01	-.07	-.12	-.16*	-.04	-.17*	-.19**	.09	.30**	.32**
19.	Density, time 3	3.54	0.71	.06	.05	.08	.02	-.13	-.14*	-.22**	-.13	-.19**	-.28**	.07	.31**	.33**
20.	Role clarity, time 1	4.86	1.17	.50**	.26**	.01	.02	.01	-.02	.01	.03	.01	-.02	.04	.02	-.01
21.	Role clarity, time 2	5.07	1.18	.40**	.24**	.03	.03	.05	.09	.11	.00	.14*	.12	-.02	.01	.02
22.	Role clarity, time 3	5.36	1.16	.30**	.25**	.02	.03	.09	.10	.15*	.09	.16*	.18**	.13	.09	.08
23.	Task mastery, time 1	3.57	0.62	.12	.26**	.04	-.03	.02	.00	.02	-.01	.03	.09	.03	.03	.03
24.	Task mastery, time 2	3.84	0.64	.20**	.24**	.02	.00	.05	.08	.11	.10	.15*	.17*	.02	.08	.11
25.	Task mastery, time 3	3.95	0.64	.12	.26**	-.02	-.05	-.02	.03	.10	.05	.08	.14*	.08	.12	.16*
26.	Social integration, time 1	3.86	0.74	.46**	.30**	.20**	.21**	.07	.10	.10	.03	.09	.10	.07	.10	.09
27.	Social integration, time 2	3.89	0.85	.39**	.12	.16*	.18**	.04	.11	.12	-.05	.09	.08	.04	.00	.04
28.	Social integration, time 3	3.86	0.92	.24**	.14*	.10	.10	.10	.17*	.17*	.06	.13	.10	.13	.07	.08
29.	Promotability (newcomer)	4.95	1.59	.26**	.15*	.06	.11	.01	.05	.07	.04	.11	.11	.11	.08	.03
30.	Career goal clarity	3.68	0.81	.20**	.26**	.02	.02	.14*	.16*	.20**	.23**	.23**	.21**	.12	.10	.09
31.	Career satisfaction	3.58	0.82	.27**	.19**	.11	.11	.10	.17*	.16*	.16*	.19**	.12	.04	.04	.01
32.	Turnover intention	2.75	1.55	-.25**	-.13*	-.20**	-.18**	-.05	-.12	-.15*	-.08	-.13*	-.11	.00	.02	.00
33.	Rec for salary increase (supervisor)	5.38	1.32	.19*	.10	.04	.11	-.05	-.07	-.07	-.10	-.02	.01	-.01	.05	-.01
34.	Promotability (supervisor)	5.41	1.12	.13	.13	.11	.18*	-.03	.01	.05	-.12	.03	.08	.04	.06	.03

Note. N = 220; N = 128 (for promotability and recommendation for salary increase answered by newcomers' supervisors); * $p < .05$, ** $p < .01$; rec for salary increase = recommendation for salary increase; coefficient alpha reliabilities are reported on the diagonal in bold.

Table 4 (continued)
Descriptive Statistics, Reliability Coefficients, and Correlations

	Variables	M	s.d.	14	15	16	17	18	19	20	21	22	23	24	25	26
1.	Institutionalized tactics	4.38	0.69													
2.	Proactive personality	5.08	0.81													
3.	Initiated interdependence	3.38	1.02													
4.	Received interdependence	3.58	0.92													
5.	Size, time 1	5.15	3.29													
6.	Size, time 2	6.97	4.32													
7.	Size, time 3	8.54	5.45													
8.	Range, time 1	0.67	1.50													
9.	Range, time 2	1.30	2.17													
10.	Range, time 3	1.97	3.23													
11.	Status, time 1	2.60	0.61													
12.	Status, time 2	2.53	0.57													
13.	Status, time 3	2.48	0.54													
14.	Tie strength, time 1	4.19	0.74	***n.a.***												
15.	Tie strength, time 2	3.91	0.80	.44**	***n.a.***											
16.	Tie strength, time 3	3.77	0.81	.34**	.85**	***n.a.***										
17.	Density, time 1	3.81	0.55	.43**	.06	.00	***n.a.***									
18.	Density, time 2	3.66	0.62	.07	.46**	.44**	.15*	***n.a.***								
19.	Density, time 3	3.54	0.71	.03	.35**	.37**	.13	.70**	***n.a.***							
20.	Role clarity, time 1	4.86	1.17	.04	.06	.04	.08	.01	.11	**.92**						
21.	Role clarity, time 2	5.07	1.18	.09	.10	.07	-.03	-.07	.02	.49**	**.92**					
22.	Role clarity, time 3	5.36	1.16	.13	.00	-.05	.08	-.08	.01	.48**	.59**	**.92**				
23.	Task mastery, time 1	3.57	0.62	.04	.03	.00	.04	.00	.06	.46**	.26**	.24**	**.75**			
24.	Task mastery, time 2	3.84	0.64	.07	.10	.09	-.01	.06	.09	.30**	.54**	.39**	.52**	**.80**		
25.	Task mastery, time 3	3.95	0.64	.08	.10	.04	.01	.07	.09	.22**	.35**	.58**	.42**	.66**	**.81**	
26.	Social integration, time 1	3.86	0.74	.12	.02	.00	.09	.01	.06	.44**	.30**	.23**	.32**	.26**	.19**	**.90**
27.	Social integration, time 2	3.89	0.85	.19**	.05	.06	.07	-.06	-.02	.27**	.53**	.40**	.08	.35**	.22**	.58**
28.	Social integration, time 3	3.86	0.92	.12	-.01	.03	.08	-.08	-.01	.20**	.38**	.54**	.06	.31**	.37**	.40**
29.	Promotability (newcomer)	4.95	1.59	.02	.01	.02	.06	-.07	-.08	.11	.24**	.36**	.02	.23**	.30**	.15*
30.	Career goal clarity	3.68	0.81	.00	-.06	-.07	-.01	-.03	-.03	.38**	.39**	.59**	.21**	.19**	.30**	.19**
31.	Career satisfaction	3.58	0.82	-.01	-.11	-.10	.05	-.05	-.03	.35**	.39**	.50**	.19**	.17*	.19**	.23**
32.	Turnover intention	2.75	1.55	-.06	.06	.06	.01	.10	.03	-.32**	-.45**	-.50**	-.16*	-.28**	-.28**	-.29**
33.	Rec for salary increase (supervisor)	5.38	1.32	.00	-.01	.02	.19*	.03	.13	.04	.07	.12	-.02	.05	.03	.06
34.	Promotability (supervisor)	5.42	1.12	.05	.01	-.01	.20*	-.04	.04	.14	.03	.13	.06	.10	.06	.10

Note. N = 220; N = 128 (for promotability and recommendation for salary increase answered by newcomers' supervisors); * $p < .05$, ** $p < .01$; rec for salary increase = recommendation for salary increase; coefficient alpha reliabilities are reported on the diagonal in bold.

Table 4 (continued)
Descriptive Statistics, Reliability Coefficients, and Correlations

	Variables	M	s.d.	27	28	29	30	31	32	33	34
1.	Institutionalized tactics	4.38	0.69								
2.	Proactive personality	5.08	0.81								
3.	Initiated interdependence	3.38	1.02								
4.	Received interdependence	3.58	0.92								
5.	Size, time 1	5.15	3.29								
6.	Size, time 2	6.97	4.32								
7.	Size, time 3	8.54	5.45								
8.	Range, time 1	0.43	0.88								
9.	Range, time 2	1.30	2.17								
10.	Range, time 3	1.97	3.23								
11.	Status, time 1	2.60	0.61								
12.	Status, time 2	2.53	0.57								
13.	Status, time 3	2.48	0.54								
14.	Tie strength, time 1	4.19	0.74								
15.	Tie strength, time 2	3.91	0.80								
16.	Tie strength, time 3	3.77	0.81								
17.	Density, time 1	3.81	0.55								
18.	Density, time 2	3.66	0.62								
19.	Density, time 3	3.54	0.71								
20.	Role clarity, time 1	4.86	1.17								
21.	Role clarity, time 2	5.07	1.18								
22.	Role clarity, time 3	5.36	1.16								
23.	Task mastery, time 1	3.57	0.62								
24.	Task mastery, time 2	3.84	0.64								
25.	Task mastery, time 3	3.95	0.64								
26.	Social integration, time 1	3.86	0.74								
27.	Social integration, time 2	3.89	0.85	**.93**							
28.	Social integration, time 3	3.86	0.92	.69 **	**.94**						
29.	Promotability (newcomer)	4.95	1.59	.23 **	.34 **	***n.a.***					
30.	Career goal clarity	3.68	0.81	.21 **	.37 **	.28 **	**.89**				
31.	Career satisfaction	3.58	0.82	.28 **	.41 **	.34 **	.62 **	**.89**			
32.	Turnover intention	2.75	1.55	-.43 **	-.56 **	-.34 **	-.44 **	-.52 **	**.80**		
33.	Rec for salary increase (supervisor)	5.38	1.32	.00	.00	.25 **	-.03	.08	-.10	***n.a.***	
34.	Promotability (supervisor)	5.42	1.12	.05	.14	.17 *	.05	.16	-.18 *	.61 **	**.75**

Note. N = 220; N = 128 (for promotability and recommendation for salary increase answered by newcomers' supervisors); * $p < .05$, ** $p < .01$; rec for salary increase = recommendation for salary increase; coefficient alpha reliabilities are reported on the diagonal in bold.

Table 5

Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer's Communication Networks

	Time 1 (Week 4)					Time 2 (Week 16)					Time 3 (Week 28)				
	Size	Range	Status	Tie strength	Density	Size	Range	Status	Tie strength	Density	Size	Range	Status	Tie strength	Density
Control															
Age	.03	.01	-.17	-.18	-.33 *	.05	-.02	-.07	-.24	-.08	-.08	-.09	.02	-.17	-.20
Gender	-.03	.09	-.01	.04	.-18 *	.02	.16 *	.07	.02	-.11	.01	.10	.06	.01	-.18 **
Race	.00	.18 **	-.06	-.18 *	-.18 *	-.04	.03	.01	.04	.04	-.05	-.03	-.07	.12	.00
Education	-.01	-.02	-.10	-.07	-.03	.02	.02	-.04	-.07	-.10	.06	.09	-.10	-.06	-.09
Experience	.11	.15	.17	.15	.18	.12	.21	.11	.18	.08	.22	.21	.08	.14	.07
Referral	-.14 †	-.11	.05	.07	.01	-.15 *	-.12 †	.06	-.04	-.04	-.12 †	-.08	.04	-.01	.07
Antecedents															
Institutionalized tactics	.00	-.14 †	-.01	.10	.14 †	.05	-.01	-.04	.09	.02	.08	.01	-.01	.05	.05
Initiated interdependence	.04	.14	-.11	-.01	-.03	.02	.01	-.01	-.03	.08	-.03	-.07	-.04	.07	.09
Received interdependence	.10	.03	.08	.04	.02	.18 *	.18 *	.16 †	.01	-.04	.19 *	.19 *	.18 *	-.04	-.05
Proactive personality	.03	.10	.08	.05	.03	-.01	.12 †	.10	-.03	.02	.01	.11	.02	-.05	.04
R^2	.05	.11	.03	.06	.11	.10	.14	.05	.04	.03	.09	.09	.06	.03	.07
ΔR^2	.02	.04 †	.01	.02	.02	.04 †	.05 *	.03	.01	.01	.04 †	04 †	.03	.01	.01

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 6
Parameters Estimates of Latent Growth Models (Newcomer's Communication Networks)

Variables	Size	Range	Status	Tie Strength	Density
Mean initial status	1.54 **	-1.61 **	2.59 **	4.14 **	3.80 **
Variance in initial status	.24 **	2.60 **	.28 **	.29 **	.05
Mean growth rate	.23 **	.60 **	-.05 **	-.19 **	-.13 **
Variance in growth rate	.00	.06	.03 **	.09 **	.10 **
Covariance (initial status and growth rate)	.01	.04	-.02 **	.00	.01

Note. N = 220; * $p < .05$, ** $p < .01$

Table 7

Results of Hierarchical Multiple Regression Analysis for the Effects of Newcomer's Communication Networks on Newcomer Adjustment

	Time 1 (Week 4)			Time 2 (Week 16)			Time 3 (Week 28)		
	Role clarity	Task mastery	Social integration	Role clarity	Task mastery	Social integration	Role clarity	Task mastery	Social integration
Control variable									
Age	-.15	-.26	.11	.06	.08	.09	-.12	-.08	.20
Gender	-.09	-.02	.00	-.11	-.05	-.04	-.05	.01	-.05
Race	.15 *	.01	.01	.12 †	.08	-.03	.08	.00	-.03
Education	-.14 †	-.17 *	-.12	-.09	-.13 †	-.05	-.07	-.14 *	.05
Experience	.02	.21	.03	-.11	-.11	.01	.01	.09	-.21
Referral	-.05	-.01	.01	-.18 †	-.04	-.07	-.10	.03	-.08
Communication Networks									
Size, time 1 to 3	.02	.04	.09	.04	.04	.07	.08	.05	.17 *
Range, time 1 to 3	.02	-.04	-.03	.09	.14 †	.02	.15 †	.15 †	.01
Status, time 1 to 3	.01	.00	.03	.04	.06	.02	.09	.12 †	.11
Tie strength, time 1 to 3	.02	.02	.08	.15 *	.06	.11	-.08	-.01	.07
Density, time 1 to 3	.06	.00	.07	-.16 *	.02	-.11	.05	.09	-.02
R^2	.08	.05	.05	.11	.07	.04	.08	.08	.06
ΔR^2	.01	.00	.02	.04 †	.03	.02	.05 *	.05 †	.04

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 8
Parameters Estimates of Latent Growth Models (Newcomer Adjustment)

Variables	Role Clarity	Task Mastery	Social Integration
Mean initial status	4.85 **	3.60 **	3.87 **
Variance in initial status	.70 **	.24 **	.46 **
Mean growth rate	.26 **	.18 **	.00
Variance in growth rate	.09	.07	.18 **
Covariance (initial status and growth rate)	-.03	-.04	-.09 *

Note. N = 220; * $p < .05$, ** $p < .01$

Table 9

Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer Adjustment

	Time 1 (Week 4)			Time 2 (Week 16)			Time 3 (Week 28)		
	Role clarity	Task mastery	Social integration	Role clarity	Task mastery	Social integration	Role clarity	Task mastery	Social integration
Control variable									
Age	-.19	-.23	.16	.03	.08	.10	-.12	-.10	.22
Gender	-.10 †	-.03	-.02	-.08	-.03	-.02	-.04	.01	-.05
Race	.06	-.05	-.05	.07	.04	-.04	.00	-.08	-.05
Education	-.08	-.18 *	-.05	-.03	-.13 †	.04	-.03	-.16 *	.09
Experience	.04	.17	-.03	-.08	-.08	-.01	.04	.16	-.19
Referral	.01	.03	.04	-.15 *	-.03	-.08	-.06	.08	-.08
Socialization factors									
Institutionalized tactics	.47 **	.06	.39 **	.35 **	.13 †	.37 **	.25 **	.06	.22 **
Initiated interdependence	-.04	.00	.08	.00	-.01	.08	-.08	-.06	.07
Received interdependence	-.03	-.08	.10	-.01	.00	.08	.05	-.06	.03
Proactive personality	.14 *	.24 **	.21 **	.13 *	.19 **	.02	.18 **	.25 **	.10
R^2	.32	.12	.30	.22	.10	.19	.14	.10	.10
ΔR^2	.25 **	.07 **	.26 **	.15 **	.06 **	.17 **	.11 **	.07 **	.08 **

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 10

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer's Communication Networks on the Relationships between Institutionalized Socialization Tactics and Newcomer Adjustment

	Role clarity, time 1			Social integration, time 1		
Control variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	-.18	-.19	-.19	.07	.05	.06
Gender	-.10	-.10 †	-.11 †	-.01	-.01	-.02
Race	.14 *	.10	.09	-.02	-.06	-.07
Education	-.14 *	-.06	-.06	-.13 †	-.05	-.05
Experience	04	.04	.03	.08	.07	.06
Referral	-.05	-.02	-.01	.01	.04	.04
Socialization Factors						
Institutionalized tactics		.49 **	.49 **		.46 **	.46 **
Communication Networks						
Range, time 1			.07			.05
R^2	.08	.30	.30	.03	.23	.23
ΔR^2	.08 *	.22 **	.00	.03	.20 **	.00

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 11

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer's Communication Networks on the Relationships between Proactive Personality and Newcomer Adjustment

	Role clarity, time 2			Task mastery, time 2		
Control variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	.02	.07	.08	.05	.10	.11
Gender	-.07	-.08	-.10	-.02	-.03	-.05
Race	.12 †	.09	.09	.08	.05	.05
Education	-.08	-.09	-.09	-.14 †	-.14 *	-.15 *
Experience	-.06	-.10	-.13	-.05	-.10	-.14
Referral	-.20 **	-.16 *	-.15 *	-.07	-.04	-.03
Socialization Factors						
Proactive personality		.21 **	.19 **		.22 **	.21 **
Communication Networks						
Range, time 2			.11			.13 †
R^2	.07	.11	.12	.04	.08	.10
ΔR^2	.07 *	.04 **	.01	.04	.05 *	.02 †

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 12

Results of Hierarchical Multiple Regression Analysis for the Effects of Newcomer Adjustment on Newcomer Career Success

	Time 3 (Week 28)					
	Career goal clarity	Career satisfaction	Turnover intention	Promotability	Promotability‡	Salary increase recommendation‡
Control variable						
Age	.11	.04	.00	-.07	-.03	.24
Gender	-.05	-.02	.02	.02	.01	.00
Race	.16 **	.05	.05	.09	-.18 *	-.18 †
Education	.10 †	.04	.03	.11	.15	.08
Experience	-.06	.03	-.05	.07	-.04	-.23
Referral	-.02	-.05	.05	-.03	-.22 *	-.05
Adjustment						
Role clarity, time 3	.60 **	.51 **	-.35 **	.19 *	.13	.24 †
Task mastery, time 3	-.03	.17 *	.07	.15 †	-.02	-.07
Social integration, time 3	.06	.19 **	-.38 **	.17 *	.07	-.10
R^2	.42	.32	.38	.18	.13	.07
ΔR^2	.37 **	.30 **	.36 **	.17 **	.03	.03

Note. N = 220 (career goal clarity, career satisfaction, turnover intention, and promotaibility measured by newcomers); N = 128 (promotability‡ and salary increase recommendation‡ answered by newcomers' supervisors); † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 13

Results of Hierarchical Multiple Regression Analysis for the Effects of Socialization Factors on Newcomer Career Success (post hoc analysis)

	Time 3 (Week 28)					
	Career goal clarity	Career satisfaction	Turnover intention	Promotability	Promotability‡	Salary increase recommendation‡
Control variable						
Age	.10	.05	-.06	-.07	-.01	.26
Gender	-.09	-.05	.05	.01	-.01	-.01
Race	.15 *	.06	.03	.06	-.19 *	-.19 *
Education	.10	.10	-.05	.12 †	.18 †	.09
Experience	-.08	-.03	.04	.04	-.07	-.32
Referral	-.05	-.12 †	.12 †	-.06	-.22 *	-.06
Antecedents						
Institutionalized tactics	.16 *	.24 **	-.21 **	.25 **	.13	.22 *
Initiated interdependence	.01	.11	-.16 †	.01	.03	-.03
Received interdependence	-.01	.01	-.05	.05	.15	.10
Proactive personality	.25 **	.11	-.06	.07	.12	.09
R^2	.15	.12	.12	.10	.17	.12
ΔR^2	.10 **	.10 **	.10 **	.08 **	.07 *	.07 †

Note. N = 220 (career goal clarity, career satisfaction, turnover intention, and promotaibility measured by newcomers); N = 128 (promotability‡ and salary increase recommendation‡ answered by newcomers' supervisors); † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 14

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer Adjustment on the Relationships between Institutionalized Socialization Tactics and Newcomer Career Success (post hoc analysis)

	Career goal clarity						Career satisfaction					
Control variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
Age	.04	.03	.02	.02	.02	.02	.02	.00	.00	.00	-.01	.00
Gender	-.08	-.08	-.05	-.07	-.07	-.05	-.05	-.05	-.03	-.05	-.05	-.03
Race	.19**	.17*	.14*	.16*	.18**	.14*	.07	.05	.02	.04	.06	.03
Education	.07	.11	.12†	.13†	.11	.12†	.04	.09	.10	.10	.09	.09
Experience	-.02	-.02	.00	-.01	-.02	.00	.02	.02	.04	.03	.01	.03
Referral	-.09	-.08	-.02	-.07	-.07	-.02	-.13†	-.12†	-.06	-.11	-.11	-.06
Socialization Factors												
Institutionalized tactics		.21**	.08	.19**	.15*	.07		.28**	.15*	.26**	.20**	.14†
Adjustment												
Role clarity, time 2			.38**			.38**			.33**			.33**
Task mastery, time 2				.17*		-.01				.13†		-.05
Social integration, time 2					.18*	.01					.20**	.07
R^2	.05	.09	.20	.12	.12	.20	.02	.10	.18	.11	.13	.19
ΔR^2	.05	.04**	.11**	.03*	.03*	.11**	.02	.07**	.09**	.02†	.03**	.09**

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 14 (continued)

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Newcomer Adjustment on the Relationships between Institutionalized Socialization Tactics and Newcomer Career Success (post hoc analysis)

	Turnover intention						Promotability (newcomers)					
Control variable	Model 13	Model 14	Model 15	Model 16	Model 17	Model 18	Model 19	Model 20	Model 21	Model 22	Model 23	Model 24
Age	-.02	.00	.00	.01	.02	.02	-.09	-.10	-.10	-.11	-.11	-.11
Gender	.05	.05	.02	.04	.03	.02	.01	.01	.02	.02	.01	.02
Race	.05	.07	.11 †	.09	.05	.08	.09	.07	.05	.05	.08	.06
Education	.03	-.02	-.03	-.05	-.01	-.03	.08	.13 †	.13 †	.15 *	.13 †	.15 *
Experience	-.02	-.02	-.04	-.03	.00	-.03	.09	.09	.10	.10	.08	.09
Referral	.12 †	.11	.04	.10	.09	.05	-.06	-.05	-.02	-.03	-.04	-.03
Socialization Factors												
Institutionalized tactics		-.25 **	-.10	-.21 **	-.10	-.04		.27 **	.21 **	.23 **	.21 **	.20 **
Adjustment												
Role clarity, time 2			-.42 **			-.28 **			.16 *			.02
Task mastery, time 2				-.26 **		-.05				.21 **		.18 *
Social integration, time 2					-.39 **	-.25 **					.16 *	.09
R^2	.02	.08	.22	.14	.21	.27	.01	.08	.10	.12	.10	.13
ΔR^2	.02	.06 **	.14 **	.06 **	.13 **	.19 **	.01	.07 **	.02 *	.04 **	.02 *	.05 *

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 14 (continued)

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Adjustment Outcomes on the Relationships between Institutionalized Socialization Tactics and Newcomers' Career Success (post hoc analysis)

	Salary increase recommendation					
Control variable	Model 25	Model 26	Model 27	Model 28	Model 29	Model 30
Age	.22	.24	.24	.24	.23	.22
Gender	.00	.00	.00	.00	.00	.00
Race	-.16 †	-.17 †	-.17 †	-.17 †	-.18 †	-.18 †
Education	.06	.10	.10	.10	.10	.12
Experience	-.22	-.29	-.29	-.29	-.27	-.26
Referral	-.05	-.04	-.04	-.04	-.04	-.04
Socialization Factors						
Institutionalized tactics		.24 **	.24 *	.23 *	.27 **	.26 *
Adjustment						
Role clarity, time 2			.00			.01
Task mastery, time 2				.03		.07
Social integration, time 2					-.08	-.12
R^2	.04	.10	.10	.10	.10	.11
ΔR^2	.04	.05 *	.00	.00	.01	.01

Note. N = 128; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Table 15

Results of Hierarchical Multiple Regression Analysis for the Mediation Effects of Adjustment Outcomes on the Relationships between Proactive Personality and Newcomer Career Success (post hoc analysis)

	Career goal clarity				
Control variable	Model 1	Model 2	Model 3	Model 4	Model 5
Age	.04	.11	.08	.09	.08
Gender	-.08	-.09	-.06	-.09	-.06
Race	.19 *	.15 *	.12 †	.14 *	.12 †
Education	.07	.06	.10	.09	.09
Experience	-.02	-.08	-.05	-.07	-.05
Referral	-.10	-.05	.01	-.04	.01
Socialization Factors					
Proactive personality		.28 **	.21 **	.25 **	.21 **
Adjustment					
Role clarity, time 2			.36 **		.38 **
Task mastery, time 2				.15 *	-.05
R^2	.05	.12	.24	.14	.24
ΔR^2	.05	.07 **	.12 **	.02 *	.12 **

Note. N = 220; † $p < .10$, * $p < .05$, ** $p < .01$; values are standardized regression coefficients.

Figure 1
Research Model

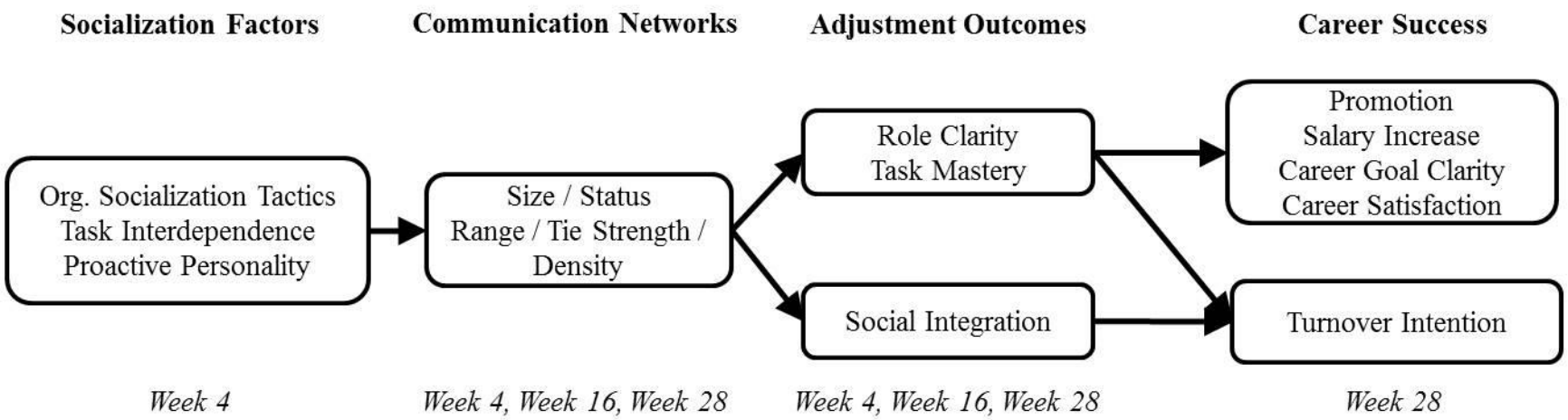
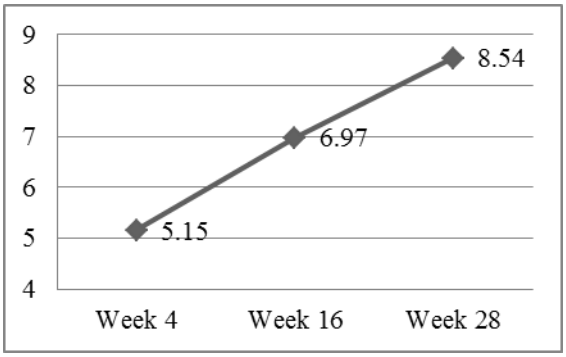


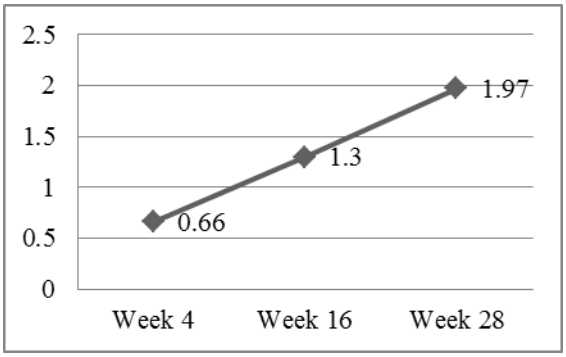
Figure 2

Newcomer's Communication Networks over Time

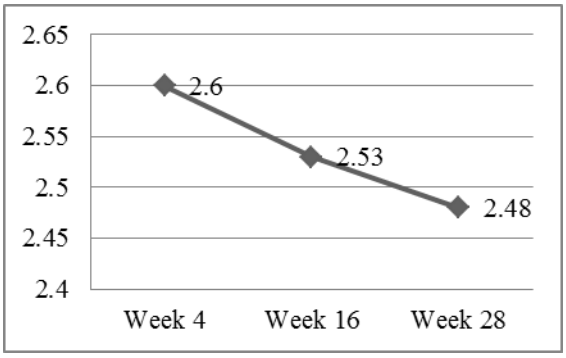
(2A) Communication Network Size



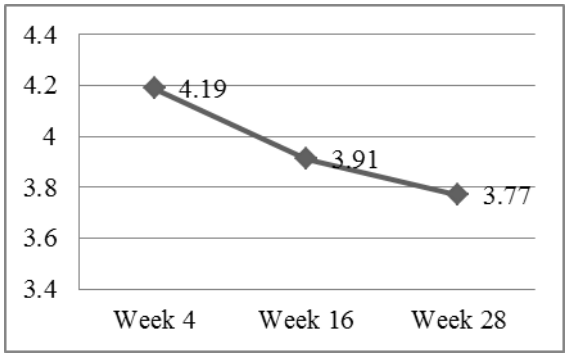
(2B) Communication Network Range



(2C) Communication Network Status



(2D) Communication Network Tie Strength



(2E) Communication Network Density

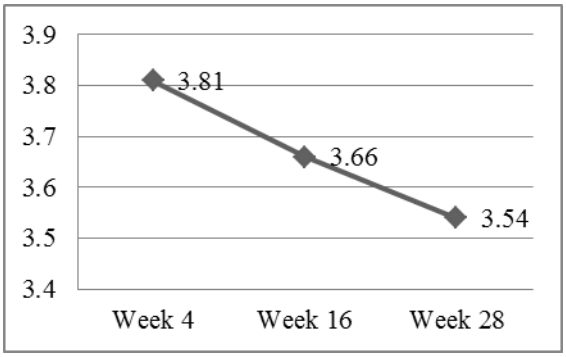
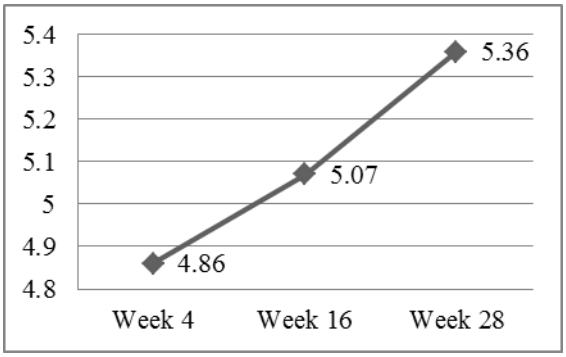
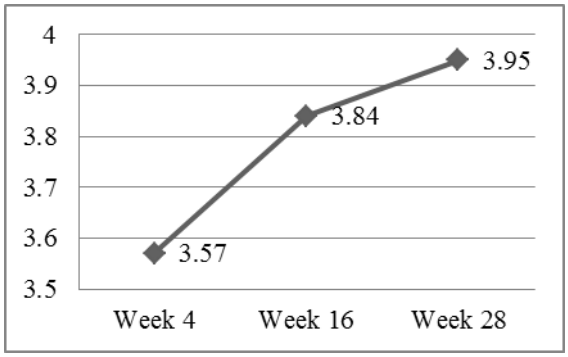


Figure 3
Newcomer Adjustment over Time

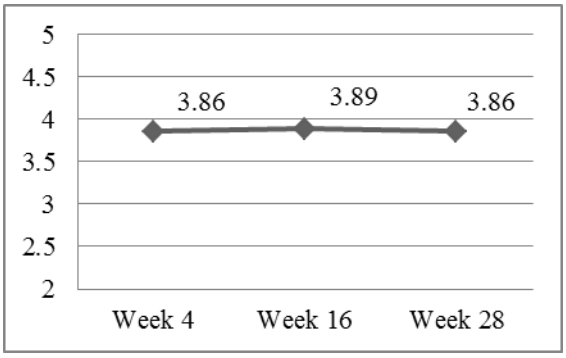
(3A) Role Clarity



(3B) Task Mastery



(3C) Social Integration



References

Adkins, C. L. (1995). Previous work experience and organizational socialization: A longitudinal examination. *Academy of Management Journal, 38*(3), 839-862. doi:10.2307/256748

Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review, 27*(1), 17-40. doi:10.2307/4134367

Allen, T. D., McManus, S. E., & Russell, J. E. A. (1999). Newcomer socialization and stress: Formal peer relationships as a source of support. *Journal of Vocational Behavior, 54*(3), 453-470. doi:10.1006/jvbe.1998.1674

Allen, T. D., Russell, J. E. A., & Rush, M. C. (1994). The effects of gender and leave of absence on attributions for high-performance, perceived organizational commitment, and allocation of organizational rewards. *Sex Roles, 31*(7-8), 443-464. doi:10.1007/BF01544200

Asendorpf, J. B., & Wilpers, S. (1998). Personality effects on social relationships. *Journal of Personality and Social Psychology, 74*(6), 1531-1544. doi:10.1037//0022-3514.74.6.1531

Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology, 81*(2), 199-214. doi:10.1037/0021-9010.81.2.199

Ashforth, B. E. (2012). The role of time in socialization dynamic. In C. R. Wanberg (Ed.), *Oxford handbook of socialization* (pp. 161-186). New York, NY: Oxford University Press.

Ashforth, B. E., & Saks, A. M. (2002). Feeling your way: Emotion and organizational entry. In R. G. Lord, R. J. Klimoski & R. Kanfer (Eds.), *Emotions in the workplace* (pp. 331-369). San Francisco, CA: Jossey-Bass.

Ashforth, B. E., Saks, A. M., & Lee, R. T. (1998). Socialization and newcomer adjustment: The role of organizational context. *Human Relations, 51*(7), 897-926. doi:10.1177/001872679805100703

Ashforth, B. E., Sluss, D. M., & Saks, A. M. (2007). Socialization tactics, proactive behavior, and newcomer learning: Integrating socialization models. *Journal of Vocational Behavior, 70*(3), 447-462. doi:10.1016/j.jvb.2007.02.001

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173

Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*(2), 103-118. doi:10.1002/job.4030140202

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*(3), 707-721. doi:10.1037/0021-9010.92.3.707

Bauer, T. N., & Erdogan, B. (2011). Organizational socialization: The effective onboarding of new employees. In S. Zedeck (Ed.), *APA handbook of industrial and*

organizational psychology (pp. 51-64). Washington, DC: American Psychological Association.

Bauer, T. N., Morrison, E. W., & Callister, R. R. (1998). Organizational socialization: A review and directions for future research. In G. R. Ferns (Ed.), Research in personnel and human resource management (Vol. 16, pp. 149-214). Greenwich, CT: JAI Press.

Blickle, G., Witzki, A. H., & Schneider, P. B. (2009). Mentoring support and power: A three year predictive field study on protégé networking and career success. *Journal of Vocational Behavior, 74*(2), 181-189. doi:10.1016/j.jvb.2008.12.008

Boswell, W. R., Shipp, A. J., Payne, S. C., & Culbertson, S. S. (2009). Changes in newcomer job satisfaction over time: Examining the pattern of honeymoons and hangovers. *Journal of Applied Psychology, 94*(4), 844-858. doi:10.1037/a0014975

Brass, D. J. (1984). Being in the right place: A structural analysis of individual influence in an organization. *Administrative Science Quarterly, 29*(4), 518-539. doi:10.2307/2392937

Brass, D. J. (1985). Mens and womens networks: A study of interaction patterns and influence in an organization. *Academy of Management Journal, 28*(2), 327-343. doi:10.2307/256204

Brass, D. J., Galaskiewicz, J., Greve, H. R., & Tsai, W. P. (2004). Taking stock of networks and organizations: A multilevel perspective. *Academy of Management Journal, 47*(6), 795-817. doi: 10.2307/20159624

Brissette, I., Scheier, M. F., & Carver, C. S. (2002). The role of optimism in social network development, coping, and psychological adjustment during a life transition.

Journal of Personality and Social Psychology, *82*(1), 102-111. doi:10.1037/0022-3514.82.1.102

Burkhardt, M. E. (1994). Social interaction effects following a technological change: A longitudinal investigation. *Academy of Management Journal, 37*(4), 869-898. doi:10.2307/256603

Burkhardt, M. E., & Brass, D. J. (1990). Changing patterns or patterns of change: The effects of a change in technology on social network structure and power. *Administrative Science Quarterly, 35*(1), 104-127. doi:10.2307/2393552

Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, *42*(2), 339-365. doi:10.2307/2393923

Burt, R. S. (2004). Structural holes and good ideas. *American Journal of Sociology, 110*(2), 349-399. doi:10.1086/421787

Chan, D. (1998). The conceptualization and analysis of change over time: An integrative approach incorporating longitudinal mean and covariance structures analysis (LMACS) and multiple indicator latent growth modeling (MLGM). *Organizational Research Methods, 1*(4), 421-483. doi:10.1177/109442819814004

Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology, 91*(2), 475-481. doi:10.1037/0021-9010.91.2.475

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*(2), 190-210. doi:10.1037//0021-9010.85.2.190

Chao, G. T., Olearykelly, A. M., Wolf, S., Klein, H. J., & Gardner, P. D. (1994). Organizational socialization: Its content and consequences. *Journal of Applied Psychology, 79*(5), 730-743. doi:10.1037//0021-9010.79.5.730

Chen, G. L. (2005). Newcomer adaptation in teams: Multilevel antecedents and outcomes. *Academy of Management Journal, 48*(1), 101-116. doi: 10.5465/AMJ.2005.15993147

Cheung, H. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*(2), 233-255. doi:10.1207/S15328007SEM0902_5

Colarelli, S. M., Dean, R. A., & Konstans, C. (1987). Comparative effects of personal and situational influences on job outcomes of new professionals. *Journal of Applied Psychology, 72*(4), 558-566. doi:10.1037/0021-9010.72.4.558

Crant, J. M. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology, 80*(4), 532-537. doi:10.1037/0021-9010.80.4.532

Crant, J. M., & Bateman, T. S. (2000). Charismatic leadership viewed from above: The impact of proactive personality. *Journal of Organizational Behavior, 21*(1), 63-75. doi:10.1002/(SICI)1099-1379(200002)21:1<63::AID-JOB8>3.3.CO;2-A

De Vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology, 82*(4), 761-777. doi:10.1348/096317909X471013

Everett, M., & Borgatti, S. P. (2005). Ego network betweenness. *Social Networks, 27*(1), 31-38. doi:10.1016/j.socnet.2004.11.007

Fang, R., Duffy, M. K., & Shaw, J. D. (2011). The organizational socialization process: Review and development of a social capital model. *Journal of Management, 37*(1), 127-152. doi:10.1177/0149206310384630

Feldman, D. C. (1976). Contingency theory of socialization. *Administrative Science Quarterly*, *21*(3), 433-452. doi:10.2307/2391853

Feldman, D. C. (1981). The multiple socialization of organization members. *The Academy of Management Review, 6*(2), 309-318. doi: 10.5465/AMR.1981.4287859

Feldman, D. C., & Weitz, B. A. (1990). Summer interns: Factors contributing to positive developmental experiences. *Journal of Vocational Behavior*, *37*(3), 267-284. doi:10.1016/0001-8791(90)90045-4

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management, 11*(3), 39-53. doi:10.1177/014920638501100304

Fuller, B.,Jr., & Marler, L. E. (2009). Change driven by nature: A meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, *75*(3), 329-345. doi:10.1016/j.jvb.2009.05.008

Gattiker, U. E., & Larwood, L. (1989). Career success, mobility and extrinsic satisfaction of corporate managers. *Social Science Journal, 26*(1), 75-92. doi:10.1016/0362-3319(89)90039-6

Gibbons, D. E. (2004). Friendship and advice networks in the context of changing professional values. *Administrative Science Quarterly, 49*(2), 238-262. doi: 10.2307/4131473

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, *78*(6), 1360-1380. doi:10.1086/225469

Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in organizational behavior: An annual series of analytical essays and critical reviews, 28*, 3-34. doi:10.1016/j.riob.2008.04.002

Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal, 33*(1), 64-86. doi:10.2307/256352

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*(1), 90-104. doi:10.1016/j.jvb.2006.03.001

Hackman, J. R., & Oldham, G. R. (1975). Development of job diagnostic survey. *Journal of Applied Psychology, 60*(2), 159-170. doi:10.1037/h0076546

Hays, R. B., & Oxley, D. (1986). Social network development and functioning during a life transition. *Journal of Personality and Social Psychology, 50*(2), 305-313. doi:10.1037//0022-3514.50.2.305

Hurst, C., Kammeyer-Mueller, J. D., & Livingston, B. A. (2012). The odd one out: How newcomers who are different become adjusted. In C. R. Wanberg (Ed.), *Oxford handbook of socialization* (pp. 115-138). New York, NY: Oxford University Press.

Ibarra, H. (1995). Race, opportunity, and diversity of social circles in managerial networks. *Academy of Management Journal, 38*(3), 673-703. doi:10.2307/256742

Jex, S. M., & Britt, T. W. (2008). *Organizational psychology: A scientist-practitioner approach* (2nd ed.). Hoboken, NJ: John Wiley & Sons.

Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review, 31*(2), 386-408. doi: 10.5465/AMR.2006.20208687

Jokisaari, M., & Nurmi, J. E. (2009). Change in newcomers' supervisor support and socialization outcomes after organizational entry. *Academy of Management Journal, 52*(3), 527-544. doi: 10.5465/AMJ.2009.41330971

Jokisaari, M., & Nurmi, J. E. (2012). Getting the right connections? The consequences and antecedents of social networks in newcomer socialization. In C. R. Wanberg (Ed.), *Oxford handbook of socialization* (pp. 78-96). New York, NY: Oxford University Press.

Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers adjustments to organizations. *Academy of Management Journal, 29*(2), 262-279. doi:10.2307/256188

Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. (1995). An empirical investigation of the predictors of executive career success. *Personnel Psychology, 48*(3), 485-519. doi:10.1111/j.1744-6570.1995.tb01767.x

Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology, 52*(3), 621-652. doi:10.1111/j.1744-6570.1999.tb00174.x

Judge, T. A., Klinger, R. L., & Simon, L. S. (2010). Time is on my side: Time, general mental ability, human capital, and extrinsic career success. *Journal of Applied Psychology, 95*(1), 92-107. doi:10.1037/a0017594

Kammeyer-Mueller, J. D. (2007). The dynamics of newcomer adjustment: Dispositions, context, interaction, and fit. In C. Ostroff, & T. A. Judge (Eds.), *Perspectives on organizational fit* (pp. 99-122). Greenwich: CT: Information Age Publishing.

Kammeyer-Mueller, J. D., Livingston, B. A., & Liao, H. (2011). Perceived similarity, proactive adjustment, and organizational socialization. *Journal of Vocational Behavior, 78*(2), 225-236. doi:10.1016/j.jvb.2010.09.012

Kammeyer-Mueller, J. D., & Wanberg, C. R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology, 88*(5), 779-794. doi:10.1037/0021-9010.88.5.779

Kammeyer-Mueller, J. D., Wanberg, C. R., Rubenstein, A., & Song, Z. (2013). Support, undermining, and newcomer socialization: Fitting in during the first 90 days. *Academy of Management Journal, 56*(4), 1104-1124. doi: 10.5465/amj.2010.0791

Katz, R. (1978). Job longevity as a situational factor in job satisfaction. *Administrative Science Quarterly, 23*(2), 204-223. doi:10.2307/2392562

Kiggundu, M. N. (1981). Task interdependence and the theory of job design. *The Academy of Management Review, 6*(3), 499-508. doi: 10.5465/AMR.1981.4285795

Kilduff, M., & Brass, D. J. (2010). Organizational social network research: Core ideas and key debates. *Academy of Management Annals, 4*, 317-357. doi:10.1080/19416520.2010.494827

Klein, K. J., Lim, B. C., Saltz, J. L., & Mayer, D. M. (2004). How do they get there? An examination of the antecedents of centrality in team networks. *Academy of Management Journal, 47*(6), 952-963. doi: 10.2307/20159634

Kossinets, G., & Watts, D. J. (2006). Empirical analysis of an evolving social network. *Science, 311*(5757), 88-90. doi:10.1126/science.1116869

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*(2), 281-342. doi:10.1111/j.1744-6570.2005.00672.x

Lance, C. E., Vandenberg, R. J., & Self, R. M. (2000). Latent growth models of individual change: The case of newcomer adjustment. *Organizational Behavior and Human Decision Processes, 83*(1), 107-140. doi:10.1006/obhd.2000.2904

LeBreton, J. M., Wu, J., & Bing, M. N. (2009). The truth(s) on testing for mediation in the social and organizational sciences. In C. E. Lance, & R. J. Vandenberg (Eds.), *Statistical and methodological myths and urban legends: Doctrine, verity and fable in the organizational and social sciences* (pp. 109-143). New York, NY: Routledge.

Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper & Row.

Louis, M. R. (1980). Surprise and sense making: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly, 25*(2), 226-251. doi:10.2307/2392453

Louis, M. R., Posner, B. Z., & Powell, G. N. (1983). The availability and helpfulness of socialization practices. *Personnel Psychology, 36*(4), 857-866. doi:10.1111/j.1744-6570.1983.tb00515.x

MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. *Annual Review of Psychology, 58*, 593-614. doi:10.1146/annurev.psych.58.110405.085542

Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the big five to motivation to learn and development activity. *Journal of Applied Psychology, 91*(4), 927-935. doi:10.1037/0021-9010.91.4.927

Marsden, P. V. (1990). Network data and measurement. *Annual Review of Sociology, 16*, 435-463. doi: 10.1146/annurev.so.16.080190.002251

Mehra, A., Kilduff, M., & Brass, D. J. (2001). The social networks of high and low self-monitors: Implications for workplace performance. *Administrative Science Quarterly, 46*(1), 121-146. doi:10.2307/2667127

Merton, R. K. (1988). The Matthew effect in science, II: Cumulative advantage and the symbolism of intellectual property. *Isis, 79*(299), 606-623. doi:10.1086/354848

Merton, R. K. (2010). The Matthew effect in science. *Berliner Journal Fur Soziologie, 20*(3), 285-308.

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6), 1102-1121. doi: 10.2307/3069391

Moreland, R. L., & Levine, J. M. (1982). Socialization in small groups: Temporal changes in individual-group relations. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 137-1982). San Diego, CA: Academic Press.

Moreland, R. L., & Levine, J. M. (2001). Socialization in organizations and work groups. In M. Turner (Ed.), *Groups at work* (pp. 69-112). Mahwah, NJ: Lawrence Erlbaum Associates.

Moreland, R. L., & Levine, J. M. (2002). Socialization and trust in work groups. *Group Process & Intergroup Relations, 5*(3), 185-201. doi: 10.1177/1368430202005003001

Morgeson, F. P., & Humphrey, S. E. (2006). The work design questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91*(6), 1321-1339. doi:10.1037/0021-9010.91.6.1321

Morrison, E. W. (1993a). Longitudinal study of the effects of information seeking on newcomer socialization. *Journal of Applied Psychology, 78*(2), 173-183. doi:10.1037//0021-9010.78.2.173

Morrison, E. W. (1993b). Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal, 36*(3), 557-589. doi:10.2307/256592

Morrison, E. W. (2002). Newcomers' relationships: The role of social network ties during socialization. *Academy of Management Journal, 45*(6), 1149-1160. doi:10.2307/3069430

Muthén, L. K., & Muthén, B. O. (2012). *MPlus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Nebus, J. (2006). Building collegial information networks: A theory of advice network generation. *Academy of Management Review, 31*(3), 615-637. doi: 10.2307/20159232

Nelson, D. L., & Quick, J. C. (1991). Social support and newcomer adjustment in organizations: Attachment theory at work. *Journal of Organizational Behavior, 12*(6), 543-554. doi:10.1002/job.4030120607

Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology, 58*(2), 367-408. doi:10.1111/j.1744-6570.2005.00515.x

Oh, H., & Kilduff, M. (2008). The ripple effect of personality on social structure: Self-monitoring origins of network brokerage. *Journal of Applied Psychology, 93*(5), 1155-1164. doi:10.1037/0021-9010.93.5.1155

Ostroff, C., & Kozlowski, S. W. J. (1992). Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology, 45*(4), 849-874. doi: 10.1111/j.1744-6570.1992.tb00971.x

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*(5), 879-903. doi: 10.1037/0021-9010.88.5.879

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*(2), pp. 150-163. doi: 10.2307/2391486

Robbins, S. P., & Judge, T. A. (2009). *Organizational behavior* (13th ed.). Upper Saddle River, NJ: Pearson.

Rollag, K., Parise, S., & Cross, R. (2005). Getting new hires up to speed quickly. *MIT Sloan Management Review, 46*(2), 35-41.

Saks, A. M., & Ashforth, B. E. (1997). Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior, 51*(2), 234-279. doi:10.1006/jvbe.1997.1614

Saks, A. M., & Gruman, J. A. (2012). Getting newcomers on board: A review of socialization practices and introduction to socialization resources theory. In C. R. Wanberg (Ed.), *The oxford handbook of socialization* (pp. 27-55). New York, NY: Oxford University Press.

Saks, A. M., Uggerslev, K. L., & Fassina, N. E. (2007). Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. *Journal of Vocational Behavior, 70*(3), 413-446. doi:10.1016/j.jvb.2006.12.004

Sasovova, Z., Mehra, A., Borgatti, S. P., & Schippers, M. C. (2010). Network churn: The effects of self-monitoring personality on brokerage dynamics. *Administrative Science Quarterly, 55*(4), 639-668. doi: 10.2189/asqu.2010.55.4.639

Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology, 84*(3), 416-427. doi:10.1037//0021-9010.84.3.416

Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology, 54*(4), 845-874. doi:10.1111/j.1744-6570.2001.tb00234.x

Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal, 44*(2), 219-237. doi:10.2307/3069452

Shah, P. P. (2000). Network destruction: The structural implications of downsizing. *Academy of Management Journal, 43*(1), 101-112. doi:10.2307/1556389

Society for Human Resource Management (April 13, 2011). *SHRM survey findings: Onboarding practices*. Retrieved from SHRM website: http://www.shrm.org/assets/research_PDFs/OnboardingPractices_FINAL.pdf

Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *The Academy of Management Journal, 38*(5), 1442-1465. doi: 10.2307/256865

Thacker, R. A., & Wayne, S. J. (1995). An examination of the relationship between upward influence tactics and assessments of promotability. *Journal of Management, 21*(4), 739-756. doi:10.1177/014920639502100408

Thompson, J. A. (2005). Proactive personality and job performance: A social capital perspective. *Journal of Applied Psychology, 90*(5), 1011-1017. doi:10.1037/0021-9010.90.5.1011

Van Maanen, J. (1978). People processing: Strategies of organizational socialization. *Organizational Dynamics, 7*(1), 19-36. doi:10.1016/0090-2616(78)90032-3

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

Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior, 69*(3), 410-423. doi:10.1016/j.jvb.2006.05.010

Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and outcomes of proactivity in the socialization process. *Journal of Applied Psychology, 85*(3), 373-385. doi:10.1037/0021-9010.85.3.373

Wanous, J. P. (1992). *Organizational entry: Recruitment, selection, orientation and socialization of newcomers* (2nd ed.). Reading, MA: Addison Wesley.

Watkins, M. (2003). *The first 90 days: Critical success strategies for new leaders at all levels*. Boston, MA: Harvard Business School Press.

Wolff, H. G., & Moser, K. (2009). Effects of networking on career success: A longitudinal study. *Journal of Applied Psychology, 94*(1), 196-206. doi:10.1037/a0013350

Zhou, J., Shin, S. J., Brass, D. J., Choi, J., & Zhang, Z. (2009). Social networks, personal values, and creativity: Evidence for curvilinear and interaction effects. *Journal of Applied Psychology, 94*(6), 1544-1552. doi:10.1037/a0016285

APPENDIX I: NEWCOMER SURVEY ITEMS

Demographics and Basic Information (time 1)

1. What is your gender?
   1) Male
   2) Female

2. How old are you?
   [ ] years

3. What is your race? Please select all that apply.
   1) African American
   2) Asian or Pacific Islander
   3) Hispanic
   4) Native American or Alaska Native
   5) White / Caucasian
   6) Other (please specify): _____

4. What is the highest level of education you have currently completed?
   a. Less than a high school diploma
   b. High school diploma or GED
   c. High school plus technical training or apprenticeship
   d. Some college
   e. College graduate
   f. Some graduate school
   g. Graduate or professional degree (MBA, M.A., M.S., M.D., Ph.D., law degree, etc.)

5. How many years and months of full-time work experience do you have, in any occupation?
   [ ] years [ ] months

6. How many different employers have you worked for in any capacity, not including your current job?
   [ ]

7. Is your current job in a different occupation or occupational field from your previous job?
   1) Yes
   2) No

8. Were you referred to apply to your new position by someone at your current organization?
   1) Yes
   2) No

9. If you knew someone at your current organization, please list their names. If you were referred by someone, please also include her / his name (e.g., James Smith). Please be assured that all of your responses are completely confidential. Your responses will be identified by a unique identification number; only we, researchers, will be able to match your ID to your name.

10. Please indicate the number of employees in your work group (the number of people with whom you would interact in a typical week)? [ ]

Socialization Factors (time 1)

Organizational Socialization Tactics

Please indicate the extent to which you agree with the following statements.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. Since I started this job, I have been extensively involved with other new recruits in common, job related training activities.
2. Other newcomers have been instrumental in helping me to understand my job requirements.
3. This organization puts all newcomers through the same set of learning experiences.
4. Most of my training has been carried out apart from other newcomers.
5. There is a sense of "being in the same boat" amongst newcomers in this organization.
6. I have been through a set of training experiences which are specifically designed to give newcomers a thorough knowledge of job related skills.
7. During my training for this job I was normally physically apart from regular organizational members.
8. I did not perform any of my normal job responsibilities until I was thoroughly familiar with departmental procedures and work methods.
9. Much of my job knowledge has been acquired informally on a trial and error basis.
10. I have been very aware that I am seen as "learning the ropes" in this organization.
11. There is a clear pattern in the way one role leads to another or one job assignment leads to another in this organization.
12. Each stage of the training process has, and will, expand and build upon the job knowledge gained during the preceding stages of the process.
13. The movement from role to role and function to function to build up experience and a track record is very apparent in this organization.
14. This organization does not put newcomers through an identifiable sequence of learning experiences.
15. The steps in the career ladder are clearly specified in this organization.
16. I can predict my future career path in this organization by observing other people's experiences.
17. I have a good knowledge of the time it will take me to go through the various stages of the training process in this organization.
18. The way in which my progress through is organization will follow a fixed timetable of events has been clearly communicated to me.
19. I have little idea when to expect a new job assignment or training exercise in this organization.
20. Most of my knowledge of what may happen to me in the future comes informally, through the grapevine, rather than through regular organizational channels.
21. Experienced organizational members see advising or training newcomers as one of their main job responsibilities in this organization.
22. I am gaining a clear understanding of my role in this organization from observing my senior colleagues
23. I have received little guidance from experienced organizational members as to how I should perform my job.
24. I have little or no access to people who have previously performed my role in this organization.
25. I have been generally left alone to discover what my role should be in this organization.

26. I have been made to feel that my skills and abilities are very important in this organization.
27. Almost all of my colleagues have been supportive of me personally.
28. I have had to change my attitudes and values to be accepted in this organization.
29. My colleagues have gone out of their way to help me adjust to this organization.
30. I feel that experienced organizational members have held me at a distance until I conform to their expectations.

Task Interdependence

Please indicate the extent to which you agree with the following statements as they pertain to your current job.

(1)	(2)	(3)	(4)	(5)
Strongly disagree		Neutral		Strongly Agree

1. The job requires me to accomplish my job before others complete their job.
2. Other jobs depend directly on my job.
3. Unless my job gets done, others cannot be completed.
4. The job activities are greatly affected by the work of other people.
5. The job depends on the work of many different for its completion.
6. My job cannot be done unless others do their work.

Proactive Personality

How much do you agree or disagree with the following statements?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. I am constantly on the lookout for new ways to improve my life.
2. Wherever I have been, I have been a powerful force for constructive change.
3. Nothing is more exciting than seeing my ideas turn into reality.
4. If I see something I don't like, I fix it.
5. No matter what the odds, if I believe in something I will make it happen.
6. I love being a champion for my ideas, even against others' opposition.
7. I excel at identifying opportunities.
8. I am always looking for better ways to do things.
9. If I believe in an idea, no obstacle will prevent me from making it happen.
10. I can spot a good opportunity long before others can.

<u>Adjustment Variables</u> (time 1, time2, and time 3)

Role Clarity

Please indicate the extent to which you agree with the following statements as they pertain to your current job.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. I know exactly what is expected of me.
2. I know that I have divided my time properly.
3. Explanation is clear of what has to be done
4. I feel certain about how much authority I have.
5. I know what my responsibilities are.
6. Clear, planned goals and objectives exist for my job.

Task Mastery

Please indicate the extent to which you agree with the following statements as they pertain to your current job. Try to emphasize the job as it is considered in your current organization rather than the tasks that are general to other organizations with the same job title.

(1)	(2)	(3)	(4)	(5)
Strongly disagree		Neutral		Strongly Agree

1. I am confident about the adequacy of my job skills and abilities.
2. I feel competent conducting my job assignments.
3. It seems to take me longer than planned to complete my job assignments
4. I rarely make mistakes when conducting my job assignments.
5. I have learned how to successfully perform my job in an efficient manner.
6. I have mastered the required tasks of my job.

Social Integration

Please indicate the extent to which you agree with the following statements as they pertain to your current job.

(1)	(2)	(3)	(4)	(5)
Strongly disagree		Neutral		Strongly Agree

1. I look forward to being with my co-workers each day.
2. I feel comfortable around my co-workers.
3. I feel accepted by my co-workers.
4. With my co-workers, I am easily identified as “one of the gang.”
5. I do not feel that I have much in common with my co-workers.
6. I feel little attachment to my co-workers.
7. I often feel like an outsider when I am around my co-workers.

Communication Networks (time 1, time2, and time 3)

First Survey

Sometimes, we need to communicate with others to gain information regarding our job duties, work related tasks, or our role in the organization, or discuss job-related problems. For example, if you are uncertain about what you are supposed to do at work, how to go about doing your work, or about what is expected from you at your current organization, who do you communicate with?

Please list below the names of people at your organization with whom you communicate for job-related or firm-related information or you can discuss job-related problems.

Second and Third Survey

Sometimes, we need to communicate with others to gain information regarding our job duties, work related tasks, or our role in the organization, or discuss job-related problems. For example, if you are uncertain about what you are supposed to do at work, how to go about doing your work, or about what is expected from you at your current organization, who do you communicate with?

Please list below the names of people at your organization with whom you communicate for job-related or firm-related information or you can discuss job-related problems.

Below you can see the list of people you provided with us about a couple of months ago. Based on your previous response, **please create a list of people that represents how you would answer the question today. Your responses may differ from last time. You can:**

KEEP the same people in your new list
DROP people out of your previous list if you think it is necessary
ADD new people in the new list if you think it is necessary

Name	Same Department?	Hierarchical Status		Frequency of Communication	
e.g., Calvin K.	Yes ☒ No ☐	1 = first year staff 2 = experienced staff 3 = senior 4 = manager	☒ ☐ ☐ ☐	1 = less than once a month 2 = once or twice a month 3 = 3-5 times a month 4 = a few times a week 5 = daily	☒ ☐ ☐ ☐ ☐
[ ]	Yes ☐ No ☐	1 2 3 4		1 2 3 4 5	

Do these individuals you listed know each other?

(1)	(2)	(3)	(4)
None	Some	Most	All

Career Success (time 3)

Career Goal Clarity

Please indicate the extent to which you agree or disagree with each of the following statements.

(1)	(2)	(3)	(4)	(5)
Strongly disagree		Neutral		Strongly Agree

1. I have a clear picture of my short- and long-term career goals.
2. I have a plan for what I need to do to accomplish my career goals.
3. I am comfortable with where I am heading with my career.
4. I understand how my goals fit in with this organization.
5. I know what career paths would be most satisfying to me.

Career Satisfaction

Please indicate the extent to which you agree or disagree with each of the following statements.

(1)	(2)	(3)	(4)	(5)
Strongly disagree		Neutral		Strongly Agree

1. I am satisfied with the success I have achieved in my career.
2. I am satisfied with the progress I have made toward meeting my overall career goals.
3. I am satisfied with the progress I have made toward meeting my goals for income.
4. I am satisfied with the progress I have made toward meeting my goals for advancement.
5. I am satisfied with the progress I have made toward meeting my goals for the development of new skills.

Turnover Intention

Here are some statements about you and your job. How much do you agree or disagree with each?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. I often think of leaving the organization.
2. It is very possible that I will look for a new job next year.
3. If I may choose again, I will choose to work for the current organization.

Promotability

How much do you agree or disagree with the following statement?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. My manager would encourage me to apply for a promotion.

APPENDIX II: SUPERVISOR SURVEY ITEMS

Demographics and Basic Information (time 3)

1. What is your gender?
   a) Male
   b) Female

2. What is your race? Please select all that apply.
   a) African American
   b) Asian or Pacific Islander
   c) Hispanic
   d) Native American or Alaska Native
   e) White / Caucasian
   f) Other (please specify): _____

3. For how long have you worked at this organization overall?

   1) Less than six months
   2) Six months to 1 year
   3) 1 to 3 years
   4) 4 to 6 years
   5) 7 to 9 years
   6) 10 years or longer

Recommendation for Salary Increase (time 3)

To what extent would you recommend this employee for salary increase, assuming they were available at your organization? If your opinion is not as strong, please select a choice closer to the middle of the scale.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Would definitely not recommend			Neutral/no opinion			Would recommend with confidence and without reservation

Promotability (time 3)

How much do you agree or disagree with the following statements?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Strongly disagree			Neutral			Strongly agree

1. I believe that this employee will have a successful career.
2. If I had to select a successor for my position, it would be this subordinate.
3. I believe that this subordinate has high potential.