MEASURING PYGMALION AND NORMATIVE EXPECTATION MESSAGES DURING WORKGROUP SOCIALIZATION: AN EMPIRICAL STUDY

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ABSTRACT

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Workgroup socialization is an area of study that has been largely ignored despite its implied importance in the field of organizational communication. This paper reviews the fundamental communicative elements found in organizational and workgroup socialization thus far, and puts forth hypotheses meant to examine the message properties of Pygmalion and normative expectancy effects across high performing teams. Participant responses were collected at a Northeastern financial organization. None of the relationships were found to be statistically significant, as was expected given the small sample size used in the analysis (n = 11). Preliminary findings, however, suggest that high performing teams place emphasis on holding high standards of others as well as holding them accountable for their actions. Findings also indicate that high performing teams seem to refrain from criticizing, ostracizing, and inundating their newcomers with work considered to be too difficult. The discussion is used to summarize the results, contemplate various theoretical implications, consider the limitations and strengths of this study, and provide avenues for future research.

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CHAPTER 1

INTRODUCTION

According to Ashforth, Sluss, and Harrison (2007), an organization's ability to survive is largely influenced by its capability to socialize newcomers effectively. Organizations regularly attempt to shape and mold newcomers' beliefs and values (Van Maanen & Schein, 1979). These influence attempts are complex and at times involve an elaborate series of "people processing" experiences (Van Maanen & Schein, 1979, p. 216), attempts to inculcate its values as well as knowledge of the organization's history and procedures (Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994), and deliberate sharing of messages meant to help newcomers adjust and develop professional standards (Barge & Schlueter, 2004). Top management, human resource professionals and trainers, department managers, immediate supervisors, and work unit incumbents all play a role in and have stakes in newcomer socialization.

Of particular importance is the socialization of newcomers into specific work units or groups (Moreland & Levine, 2002). Supervisors and coworkers are primary influence agents during the socialization period (Jablin, 2001) and in the context of a workgroup, have considerable influence on their attitudes, beliefs, and behaviors (Hackman, 1992; Salancik & Pfeffer, 1978). Investigations of socialization into organizations consistently point to work unit incumbents' information sharing and social support as being crucial to newcomers' 'learning the ropes,' emerging emotional ties to the organization and unit, and developing competencies in their roles (Jablin, 2001; Kozlowski & Bell, 2003). However, a number of questions remain concerning new hires' socialization into work units, especially with regard to newcomer productivity levels. For example, few studies (e.g., Berkowitz, 1954) have assessed how group members communicate the unit's quality of work standards, which types of group communication characteristics and factors are associated with newcomers' attaining high levels of work quality and productivity, and how differences in team task and composition relate to their performance standard messages to newcomers.

Expectations appear to be a critical factor when considering newcomers' socialization into workgroups. Research suggests that newcomers must meet the role expectations of their work unit if the new hires are to survive and thrive (Barker, 1993). Further, a series of studies by Eden (1990) suggests that when newcomers and others expect more of themselves, they perform at a higher level. Current research by Chen and Klimoski (2003) extend these findings by showing that high team expectations of a newcomer result in a superior performance, indicating that high team expectations are especially important during the socialization period. Chen (2005) adds to these findings by showing that placing newcomers on high performing teams will result in greater performance improvement when compared to being placed on a low performing team. In essence, Chen (2005) suggests that supervisors and co-workers on high performing teams can raise newcomer performance by establishing high expectations, strong productivity norms, and a supportive climate.

This study examines the nature of the work unit's communicative influence on newcomer productivity with a special emphasis on the power of expectations. Theoretically, there are two explanations that provide potential explanations of how supervisors and coworkers influence newcomer work quality and productivity via expectations. First, incumbents instill the newcomer with a sense of empowerment through positive climate, strong goal emphasis, inclusion, and positive feedback (i.e. self-fulfilling prophecy) (Rosenthal, 1973). Alternatively, incumbents set forth expectations as a normative influence. If group expectations are not met, social sanctions are dished out (Barker, 1993; Gibson & Papa, 2000). Thus, one theory postulates that a sense of empowerment is what motivates the newcomer to raise productivity, whereas the other postulates that a sense of fear motivates the newcomer. The

first section of this paper begins with a review of organizational socialization and group socialization. The theoretical relationships of Pygmalion and normative expectation effects are next considered, with the paper positioning that these effects will play out differently across high and low performing teams. The second section of this paper presents a methodology set to examine the hypotheses put forth in the literature review.

CHAPTER 2

LITERATURE REVIEW

Organizational Socialization

Organizational socialization refers to "the process by which an organization attempts to influence and change individuals to meet its needs" (Kramer, p. 3, 2010). Socialization can be pivotal in helping newcomers make sense of their new organizational environment, deal with uncertainty, and adjust to their work-roles (Ashforth et al., 2007). Socialization can also positively influence employee performance, innovation, and commitment to the organization (Jablin, 2001; Ostroff & Kozlowski, 1992; Saks & Ashford, 1997). Neglecting to convey organizational values or work unit standards, however, increases the likelihood of lax attitudes toward job performance (Cooper-Thomas & Anderson, 2006; Van Maanen & Schein, 1979).

Given its positive and negative outcome implications, scholars have examined socialization practices in organizations from three approaches. One approach considers the mode of "people processing" during organizational entry (Van Maanen & Schein, 1979, p. 216). Van Maanen and Schein articulate a set of socialization tactics that structure newcomers' experiences: (a) collective versus individual, being socialized alongside a group of similar individuals with a common set of experiences versus being socialized in isolation from others with a unique set of experiences; (b) formal versus informal, being socialized in isolation from other members with a set of specific experiences lined up by the organization versus being immediately included with other members with no tailored experiences prepared by the organization; (c) sequential versus random, having distinct steps needed to reach the target goal versus having steps towards the target goal be ambiguous; (d) fixed versus variable, being socialized within a specific timeframe in terms of the steps needed to reach full membership versus being socialized with no timeframe and ambiguous knowledge concerning the steps needed to reach full membership; (e) serial versus disjunctive, having experienced organizational members socialize and groom newcomers versus not having the guidance of experienced organizational members during the socialization process; (f) and investiture versus divestiture, appreciating the personal characteristics and values of the individual versus stripping the individual of those personal characteristics and values in order to 'rebuild' and inculcate the newcomer with a new set of values and characteristics. These tactics may or may not be strategically implemented by the organization. Van Maanen and Schein classify collective, formal, sequential, fixed, serial, and investiture tactics as institutionalized tactics and individual, informal, random, variable, disjunctive, and divestiture as individualized tactics.

Research suggests that institutionalized tactics are associated with lower levels of role innovation, anxiety, role ambiguity, role conflict, intentions to quit, and turnover (Allen, 2006; Allen & Meyer, 1990; Ashforth & Saks, 1996; Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Jones, 1986; Mignerey, Rubin, & Gordon, 1995; Saks, 1995; Saks & Ashforth, 1997). In addition, some institutionalized tactics increase job satisfaction and organizational commitment (Saks & Ashforth, 1997). Conversely, individualized tactics are associated with higher levels of stress, higher intentions to quit, and higher levels of role innovation (Ashforth & Saks, 1996; Jones, 1986). Saks, Uggerslev, and Fassina's (2007) meta-analysis of tactic use emphasizes the importance of social context and conclude that the "social or interpersonal aspects of socialization from serial and investiture tactics are most important for newcomers' adjustment" (p. 440).

A second approach to the study of organizational socialization considers the content conveyed to newcomers. Chao et al. (1994) report six content dimensions: (a) performance proficiency, knowledge concerning the skills and abilities needed to perform tasks; (b) people, knowledge concerning organizational members, work relationships, and group dynamics; (c)

politics, knowledge concerning formal and informal work relationships, including important power structures; (d) language, knowledge concerning various types of jargon and argot specific to the organization; (e) organizational goals and values, knowledge concerning the various types of goals, values, and norms, both formal and informal, specific to the organization; (f) history, knowledge concerning the various traditions, customs, myths, and culture attached to the organization, and knowledge concerning incumbent background. Chao et al. (1994) conclude that superior knowledge in all six dimensions (i.e., being well socialized), especially with regard to knowing the organization's goals and values, politics, and performance proficiency standards, is associated with a faster promotion, greater job satisfaction, more involvement, a greater sense of identity, and higher income.

In related studies, Ostroff and Kozlowski (1992) reveal that newcomers generally tend to rely on observing and experimenting information seeking tactics to gain task and rolerelated knowledge from their supervisors and co-workers. Knowledge gained from supervisors was consistently related to positive socialization outcomes such as higher levels of commitment, satisfaction, and lower levels of intention to quit. Staton-Spicer and Darling (1986) identify 21 different general topics that constitute self, task, and impact dimensions among student teachers. They further find that some talk served different functions (i.e. informational function when speaking to individuals at schools, or cathartic function when speaking to people outside of school). They conclude, "It is through talk with others that interns learn about their new role, begin to feel a part of the culture of teachers and of the school community, and relieve some of their own frustrations and uncertainties in order to survive" (p. 228).

A third approach examines the impact of memorable messages received by newcomers. Memorable messages can provide discrete ways of solving dilemmas, provide guidelines to

achieving satisfaction, are typically brief oral injunctions, and provide information concerning various codes of conduct (Knapp, Stohl, and Reardon, 1981). Memorable messages may have lasting influence on newcomers' attitudes and behaviors. Stohl (1986) reports that 40% of memorable messages were directly tied to work experiences, and that these messages typically came from individuals higher in status, were recognized as important by the individuals receiving them, and provided important information concerning organizational culture (e.g., rules, values, requirements, norms, expectations). Barge and Schlueter (2004) also report that memorable messages serve work-related functions (e.g., contain important information concerning professional behavior, work expectations, office politics, work ethic) and interpersonal-related functions as well (e.g., promoted personal aptitude and growth, expectation reinforcement, organizational skills, provided encouragement). These messages are reported to occur during the first stages of organizational entry, typically through face-to-face interaction, are primarily benevolent in nature, and can serve to promote either innovative or custodial functions.

Together, these approaches offer complementary insights into how organizations and their members shape newcomers' entry experiences and outcomes of these experiences. As newcomers encounter collective, investiture, and serial entry processes (Van Maanen & Schein, 1979), they are also learning of the organization's goals and values, history, special language, and politics (Chao et al., 1994) and perhaps receiving messages from incumbents that over time will have lasting influence (Barge & Schlueter, 2004). Although valuable in understanding the individual's response to organizational communicative efforts at induction (Barge & Schlueter, 2004), these approaches by in large fail to explore the important influences that occur in the workgroup setting. For example, the manner by which unit members induct newcomers to their norms and processes largely determines the ease by which newcomers adjust to the

workplace, develop task competencies, and gain full group membership (Kozlowski & Bell, 2003). Concurrently, newcomers accept or resist group members' influence (Kramer, 2010; Van Maanen & Schein, 1979), develop relationships with coworkers and their supervisors (Jablin, 1987), and may even become influential on unit norms and operations (Moreland & Levine, 2002). In failing to explore the influence of message exchanges during socialization within the workgroup, our understanding of newcomer adjustment and development as well as how the work unit's actions mediate organizational influence attempts remains limited (Ashforth et al., 2007; Jablin, 2001).

The examination of newcomer socialization into their workgroups or teams may also be particularly useful in understanding how newcomer work values are molded and reinforced. Chao et al. (1994) and Kramer (1989) suggest that employees must learn new, sometimes divergent, values and standards when changing jobs and units within the same organization. How supervisors and coworkers influence newcomers' work standards are of particular interest. In an age where organizations are relying on workgroups and teams to set and monitor their performance standards, the issue of newcomer developing competencies and performing at a high level is particularly relevant.

Workgroup Socialization

Workgroup socialization refers to the process and content whereby newcomers are socialized into their work units (Moreland & Levine, 2001). Workgroup socialization parallels organizational socialization in that message senders in both spheres convey certain values and rules to newcomers. Important differences, however, between organizational socialization and workgroup socialization should be noted. First, primary influence agents in workgroup socialization are supervisors and coworkers, with whom the newcomer is developing personal relationships with and may be dependent upon for role learning (Jablin, 2001). As Jablin (1987)

notes, "research consistently supports the notion that newcomers' daily interactions with coworkers/peers are one of the most important factors affecting their socialization" (p. 701). Second, statements about (and actions from) workgroup members about organizational values and culture may differ from those expressed by top management or human resource trainers (Ashforth et al., 2007; Collinson, 1992). Workgroup members may "water down" expressions of organizational values, saying "those things really don't matter here," promote a set of values quite distinctive from those of top management, or take organizationally expressed values to an extreme level (Zurcher, 1983). Third, workgroup culture differs from group to group within the same organization (Ashforth et al., 2007; Kramer, 2010). Although messages from top management or in organizational materials espouse a set of general values, units vary in the values that they hold (Kramer, 2010), which they adhere to in keeping with their task environment, personnel, and history. Fourth, newcomers appear to be more preoccupied with learning workgroup values than those of the organization as they have significant relationships with unit members and decisions on retention and promotion are made at the unit level (Ostroff & Kozlowski, 1992).

As noted earlier, the work unit can be critical in terms of work unit adjustment, settling into the job, and professional development. For instance, team and supervisor relationships moderate the impact of unmet expectations during socialization. Major, Kozlowski, Chao, and Gardner (1995) report that unmet expectations are a prime source of "reality shock," leading to low organizational commitment. Yet, newcomers who were in high quality relationships with the team and its leader experienced less reality shock, resulting in higher organizational commitment. Louis, Posner, and Powell (1983) find that the impact of organizationally planned socialization materials and experiences used had little influence on new employee job satisfaction or withdrawal. Instead, interaction with peers, the most available form of aid for the

newcomer, was positively correlated with intentions to stay with the organization, commitment, and job satisfaction. Ostroff & Kozlowski (1992) find that supervisors and coworkers are key sources of information, and knowledge gained from their supervisors positively relates to commitment, satisfaction, and lower intentions of quitting. In short, newcomers respond to the work unit members in ways in which they do not respond to organizationally orchestrated socialization efforts. Research considering how new hires learn their roles and receive emotional support unquestionably points to the importance of information received or acquired from supervisors and coworkers (Jablin, 2001). Louis et al. (1983) conclude that sense-making derives from newcomer and peer interaction, and is a "testimony to the impact of day-to-day events which affect newcomers' feelings of comfort and competency" (p. 864).

Despite a number of findings pointing to the importance of workgroup socialization, the process by which workgroup members influence newcomers' adherence to group norms and performance standards remains far from clear. Moreland and Levine's (1982) widely acclaimed five-stage model of workgroup socialization (i.e., entry, acceptance, divergence, exit, remembrance) assumes that newcomers either accept unit norms and standards or leave. Even within knowledge forthcoming from memorable message research (e.g., Barge & Schlueter, 2004; Stohl, 1986), little is known about the messages newcomers receive related to unit norms, and how workgroups communicate their expectations. In fact, beyond research on role learning and acclimation outcomes, the role of communication in newcomers' accepting work unit norms and performance standards is rarely considered (Jablin, 1987). For instance, most reviews of socialization and assimilation (e.g., Ashforth et al., 2007; Jablin, 2001; Kozlowski & Bell, 2003) fail to address how supervisory and coworker support and relational ties as well as ambient and discriminatory messages lead to role learning and adjustment. Jablin's (1987) two-decade-old

lament claiming "empirical research exploring how and the extent to which newcomers adopt their group's norms is extremely rare" (p. 702) still stands.

Limitations regarding how newcomers acquire and develop performance standards become particularly salient when considering differences between high and low performing teams. Although high performing teams are generally more ambitious and have higher productivity norms than low performing teams (Hackman, 1992; Katzenbach & Smith, 1993), recent research suggests a link between high work team expectations and the development of newcomers' high performance expectations during socialization (Chen & Klimoski, 2003). Chen (2005) also finds that placing newcomers on high performing teams results in better performances when compared to placing newcomers on low performing teams. Together, these findings suggest the work unit has a tremendous impact on newcomers' performances via expectations. These findings also suggest that high and low performing teams seem to be engaging the newcomer in different ways. Yet, how the content, frequency, and delivery of work performance expectations differ between high and low performing workgroups is unclear.

The influence of others' expectations is well documented in society (e.g., Rosenthal, 1994) and in organizations (e.g., Kierein & Gold, 2000; McNatt, 2000). Two theoretical perspectives may inform the influence of communicated expectations on newcomers. From the educational literature, research suggests individuals will treat and respond to others differently depending upon others' expectations of them (i.e., Pygmalion effect) (Rosenthal, 2002). Interestingly enough, Chen and Klimoski (2003) cite potential Pygmalion effects as a reason for their expectation finding, but fail to consider the common behavioral characteristics tied to Pygmalion or communicative messages that provide evidence of an occurring Pygmalion effect. In contrast, during newcomer entry into the workgroup, incumbents are known to set forth their expectations of newcomer performance. These expectations may be particularly influential

on newcomers when all incumbents appear to adhere to high standards and newcomers perceive there is little tolerance of deviation from these productivity norms (Barker, 1993; Gibson & Papa, 2000; Miller & Form, 1964).

Pygmalion

Pygmalion effects are referred to as self-fulfilling prophecies, a phenomenon where others' expectations influence individual behavior (Rosenthal, 2002). Self-fulfilling prophecies have three stages: (a) an actor has an expectation that a certain behavior will occur in a targeted person in the future; (b) this expectation leads the actor to enact behaviors that would not have occurred otherwise; and (c) the actor's and the target's new behaviors aid in the completion of the event or behavior thus realizing the self-fulfilling prophecy (Eden, 1990). In their seminal classroom study, Rosenthal and Jacobson (1968) manipulate expectations by informing instructors that some of their students are more apt to "bloom" intellectually than others. One year later, newly collected IQ scores reveal that students expected to grow intellectually had a higher IQ than the other students, leading the researchers to conclude that the teachers acted and students responded in concert with the manipulated expectations, thus sparking a series of studies on self-fulfilling prophecies (e.g., Brophy, 1983). Meta-analyses generally corroborate these findings (Kierein & Gold, 2000; McNatt, 2000; Rosenthal & Rubin, 1978).

Rosenthal (1973; Harris & Rosenthal, 1985) proposes a four-factor theory positing that interpersonal communicative processes mediate the link between expectancy effects and outcome behaviors (see Table 1). In interacting with students for whom there are high expectations, teachers provide a *positive climate* by directing statements that convey social support and teacher warmth, give *feedback* through praise of students' correct answers, limiting criticism of student self-characteristics, strengthen their *input* by teaching greater amount of materials and more difficult materials, and allow for their *output* to create opportunities in

which students respond to and interact frequently within instructional settings. Together, these "factors" or instructional motifs lead students to attain superior levels of performance, reflecting their teachers' expectations.

TABLE 1

Constructs associated with Pygmalion Effects

		Teacher/Student	Work Unit
	Climate	Positive class ambiance; Fewer negative statements regarding classroom environment	Social support, warm and friendly attitudes: Group potency and likelihood of unit success.
Pygmalion Effect	Feedback	Praise and positive comments on student work; Limited criticism directed at student self; Accept student ideas and frame as meaningful; Student not ignored	Emphasize positive feedback on work contributions; Limited criticism directed at employee self.
	Output	Students called on to answer questions; Frequent interaction with teacher	Inclusion in meaningful discussions; Collaboration and idea exchange; Little to no ostracism
	Input	Increase in amount of work; More challenging work	Increase in amount of work; More challenging work

Developed from Kreitner & Kinicki (2010), Campion, Medsker, & Higgs (1993), Ferris et al. (2008), Hackman (1992), Harris & Rosenthal (1985), Jones (1984), Latham (2004), LaFasto & Larson (2001), Locke (2004), Rosenthal (1973), and Shaw (2004).

Investigations in military and industrial organizations present support for the Pygmalion effect (Kierein & Gold, 2000; McNatt, 2000). Berlew and Hall (1966) report that managers operating under high performance expectations outperformed managers with lower expectations. They also find evidence suggesting that being provided a more demanding job leads to a more successful career and speculate that high, initial company expectations during socialization are crucial to the "internalization of positive job attitudes and high standards" (p. 221). King (1971) manipulates instructor expectations of pressers, mechanics, and welders by labeling a group of each as "high aptitude personnel" and finds that those expected to have a higher aptitude had lower drop-out rates, learned quicker, received better ratings from supervisor and peers, and scored higher on an objective based measure. Other studies also support an organizational Pygmalion effect (e.g., Eden, 1990; Eden & Ravid, 1982; Eden & Shani, 1982; King, 1974; Natanovich & Eden, 2008). With regard to workgroup socialization, Chen and Klimoski (2003) find that team expectations are positively and directly associated with newcomer performance. In a follow up study using these data, Chen (2005) reports that being placed on a high performing team is crucial for future performance improvement. In essence, if a newcomer is placed on a team with high expectations of their performance, they will attain that standard whether or not they were a high performer previously. Newcomers placed on low performing teams, however, retain their prior individual high or low performance levels.

Underlying research on expectancy effects are several assumptions regarding messages from workgroup members, including the supervisor, to newcomers. Namely, researchers assume that all workgroups verbally and/or nonverbally share their performance expectations, that their messages convey similar expectations, and that these expectations positively influence newcomers' performance by instilling confidence in the member. The latter assumption is particularly questionable in that otherwise, equally viable explanations of new members performing at high levels in high performing work units might be attributable to a range of influences, including person-job fit (Kristof-Brown, Zimmerman, & Johnson, 2005), workgroup processes (LaFasto & Larson, 2001), and managerial coaching (Brown & Sitzmann,

2011). In addition, research incorporating the Pygmalion framework in workgroup settings (e.g., Chen, 2005; Chen & Klimoski, 2003; Eden, 1990) to date does not consider the role of Rosenthal's (1973) four interpersonal communication factors.

This omission is notable as these factors theoretically should be present in Pygmaliontype expectation conditions and because workgroups vary in how they assimilate newcomers. For instance, some workgroups extend warmth and acceptance to new members, but do not provide new hires with challenging work until they have proven themselves (Van Maanen & Schein, 1979; Ziller, 1965; Zurcher, 1983). Other workgroups seek newcomers' input due to their participatory structure, but offer little praise to new hires (Seibold & Shea, 2001). In this regard, incorporating Rosenthal's four-factor theory is a first step in examining the role of communication in expectancy effects on organizational newcomers, and how these interpersonal expectancy behaviors might differ across high and low performing teams.

The application of Rosenthal's (1973; Harris & Rosenthal, 1985) four-factor theory to the workgroup requires several minor, but important modifications in measurement. Generally speaking, the positive climate, feedback, input, and output factors transcend settings, but the work context and unit interaction dynamics differ in several respects from teacher-student interactions. For example, positive climate refers to instances of positive feelings, thoughts, outlooks, behaviors, and statements towards a student, and negative climate its opposite. Conceptualizations of social support certainly capture these elements in the workplace (Jablin, 2001; Redding, 1972). However, an additional, critical aspect of workgroup climate is group potency, a construct defined as a consistent positive outlook concerning group outcomes (Campion, Medsker, & Higgs, 1993). Group potency is positively associated with workgroup performance (Campion et al., 1993; Campion, Papper, & Medsker, 1996) and reflects similar efficacy attitudes advanced by Rosenthal (1973; Harris & Rosenthal, 1985). Newcomers

immersed in supportive climates, where they and their coworkers believe they will succeed, are more likely to be successful individually and as a unit then when entering an interpersonally "cold," pessimistic setting (Stajkovic, Lee, & Nyberg, 2009).

Regarding the remaining elements in the four-factor model, input refers to interpersonal responses to challenging expectations in the form of both quantity and difficulty of work (Rosenthal, 1973; Harris & Rosenthal, 1985). When teachers held high expectations of students, they gave more and harder work. Similarly, managers generally hold great power in terms of the amount and type of work assigned to incumbents (Morgeson & Humphrey, 2008) and set "stretch goals" for individuals and units, especially when they believe in the individual and work unit (Locke, 2004; Shaw, 2004).

In turn, output is synonymous with a greater frequency of interaction between teacher and students, and of teachers asking questions of students (Harris & Rosenthal, 1985; Rosenthal, 1973). In the workgroup setting, the involvement of newcomers and incumbents alike provides an indication of the unit's engagement of all members (LaFasto & Larson, 2001). Interdependence and shared responsibility are common characteristics of high performing teams (Kreitner & Kinicki, 2010). In contrast, exclusion from the group through being ignored or avoided leads to ostracism. Ostracism is associated with lower levels of belonging and meaningful existence (Zadro, Williams, & Richardson, 2004), indicating that incumbents lacking in interconnectedness are denied opportunities to frequently and meaningfully interact with their coworkers and supervisors. Given the negative impacts of ostracism on the individual (Ferris et al., 2008), newcomers experiencing a greater frequency of interaction, greater instances of information inquiry, and lower levels of ostracism from workgroup members will lead to more productive and better outcomes than individuals feeling left out of team decisions and social interactions. Finally, teachers' confidence in their students is associated with positive instructor feedback and limited criticism (Harris & Rosenthal, 1985; Rosenthal, 1973). In the workgroup, supervisors and coworkers are integral sources of feedback (Morgeson & Humphrey, 2006). Actors receiving greater levels of praise and lower levels of criticism from others will perform better than those being denied positive praise (Harris & Rosenthal, 1985).

Overall, it is reasonable to expect differences in expectations between high and low performing teams in a number of facets. High performing teams have more ambition and higher expectations than other teams in that they consistently "outperform expectations" (Katzenbach & Smith, p. 4, 1993). It is thus reasonable to assume that high performing teams communicate higher expectations to newcomers during the assimilation process. As noted above, it is important to understand how, if at all, workgroup members' communication behaviors follow Rosenthal's (1973; Harris & Rosenthal, 1985) four-factor model. Consequently, the following hypotheses are offered:

H1: Newcomers in high compared to low performing teams will report receiving higherlevels of positive group climate (e.g., social support, group potency) messages.H2: Newcomers in high compared to low performing teams will report receiving higherlevels of input (e.g., amount of work, difficulty of work).

H3: Newcomers in high compared to low performing teams will report receiving higher levels of inclusive-type (e.g., frequency of interaction, asking questions, acceptance of ideas, less ignoring) messages.

H4: Newcomers in high compared to low performing teams will report receiving higher levels of feedback (e.g., positive feedback, less criticism) messages.

Normative Expectations

Expectations may derive from norms (Burgoon, 1978) and have injunctive influence

when they convey beliefs about what ought to be done (i.e., what is expected of a person), coincide with social sanctions if not adhered to, and are intensely held (Jackson, 1966, 1975; Lapinski & Rimal, 2005). Expectations play an important role in the process of normative influence in that violating strongly held expectations is deemed un-normative and is generally frowned upon (Glynn & Huge, 2007). Table 2 provides an overview of the elements theorized to be important within the normative expectations framework.

In the work unit, members set the standards of productivity and quality by which they judge others (Barker, 1993). These standards may be deliberately set, as in the case of selfmanaged teams, or arise in emergent fashion over time to suppress productivity (Cohen & Bailey, 1997; Roethlisberger & Dickson, 1939; Zurcher, 1983). Unit members influence others through the expression of their expectations, which are reinforced verbally and nonverbally. "If the worker... underevaluates and underplays his role, he will eventually come to feel the pressure of the group, which will demand changes to place the work role in conformance with their expectation" (Miller & Form, 1964, p. 232). Gibson and Papa (2000) find that more tenured members of the work unit commonly criticize those who fail to meet the unit's norms, values, and expectations. Barker (1993) finds that longer-tenured work unit members solidify normative rules, which are then passed on to newcomers with the expectation that they identify with them. Barker also notes that new employees not meeting what is expected of them typically receive social sanctions, suggesting that expectations act as a normative influence agent shaping newcomer behaviors.

Newcomers encounter expectations from their supervisors and workgroup members upon entering the work setting (Jablin, 2001). These expectations may address work processes, quality and quantity of their output, relations to other workgroup members as well as nongroup members, adaptation of language, clothing, etc. (Argyle, 1972; Katz & Kahn, 1978; Van

Maanen & Schein, 1979). Although workgroup members serve important social support and uncertainty reduction roles (Kramer, 2010; Louis, 1980), together with the supervisor they can set and hold newcomers to high work standards (Hackman, 1992; Locke, 2004). These behavioral standards are only as credible as the extent to which workgroup incumbents adhere to them (Katz & Kahn, 1978).

Table 2

	Team Standards	High team performance standards communicated verbally & non-verbally
Normative Expectancy Effects	Accountability	Unit members confront performance levels visible and report to others
	Negative Output Feedback	Unit members confronted when their performance falls below expected levels

Constructs associated with Normative Expectancy Effects^a

Developed from Kreitner & Kinicki (2010), Campion et al. (1993), Ferris et al. (2008), Hackman (1992), Harris & Rosenthal (1985), Jones (1984), Latham (2004), LaFasto & Larson (2001), Locke (2004), Rosenthal (1973), and Shaw (2004).

One way unit members communicate performance expectations to newcomers is via feedback. Feedback can be highly effective at letting newcomers know whether or not they are meeting the group's expectations (Latham, 2004). The combination of setting challenging goals and providing incumbents with feedback is especially crucial to enhancing performance (Mento, Steel, & Karen, 1987). High performing teams have strong ambitions and productivity norms (Hackman, 1992; Katzenbach & Smith, 1993). Consequently, newcomers placed in high caliber work units are not only generally presented with high standards, but are also evaluated with considerable rigor by incumbents in order to ensure the attainment of their goals. Simply put, high performing units are more intense in their adherence and expression of their expectations in comparison to low performing units. Understanding how workgroup members communicate these expectations and how communication behaviors fluctuate between high and low performing workgroups can provide valuable insights into the causal mechanisms behind the power of expectations.

As Jones (1984) posits, high performance in workgroups is synonymous with a higher degree of task visibility in that groups are able to keep a tight leash on incumbents via close monitoring and strong evaluation procedures. A lack of feedback, conversely, goes hand in hand with increased incumbent "shirking or freeriding" (p. 686), suggesting that incumbents who are allowed to loaf off are unlikely to receive a reprimand. Although there may be numerous reasons for newcomers not receiving feedback about lagging performance (Ashford, 1986; Miller & Jablin, 1991), high performing teams are unlikely to be indifferent to newcomer output and violations of their standards. Consequently, the following hypotheses are offered to assess the extent to which normative expectations are communicated to newcomers on high performing teams:

H5: Newcomers in high compared to low performing teams will report observing their supervisor and workgroup members holding higher standards of work.H6: Newcomers in high compared to low performing teams will report experiencing higher levels of negative feedback when they experience a drop in performance.H7: Newcomers in high compared to low performing teams will report more messages of accountability by workgroup members.

Group Cohesion

Past studies have found group cohesion to be an important indicator of group productivity (e.g., Berkowitz, 1954). In fact, recent meta-analytic findings reveal positive associations between unit performance and cohesion, especially when members are committed to their task (Mullen & Cooper, 1994). Group cohesion is defined as how attractive group members perceive their groups to be (Berkowitz, 1954; Mullen & Cooper, 1994), thus implying that members in highly cohesive groups should attain a certain level of positive affect towards their immediate group members. If this were the case, then we would expect to find strong relationships between group cohesion and many of the Pygmalion variables (e.g., social support, limited criticism, group potency, etc.).

The relationship between group cohesion and normative expectation variables, however, is less clear. For instance, can workgroup cultures exist in which group attraction is high (i.e., cohesion) but messages of negative feedback and high accountability are common? It seems plausible to assume that group cohesion will play an important role within the Pygmalion and normative expectation frameworks, but the sizes and directions of relationships are ambiguous given the dissimilarities between the constructs of interest (e.g., negative feedback, etc.). Given the importance of group cohesion to unit dynamics and performance (see Mullen & Cooper, 1994), this study thus asks:

RQ1: What is the relationship of group cohesion to the Pygmalion and normative expectation frameworks and unit performance?

CHAPTER 3

METHOD

Participants

Ninety newcomers (n = 90) at a Northeastern financial company participated in the study, representing a 33% response rate (N = 275). Participants who failed to complete the survey or failed to provide information matching them with their units were dropped from the analysis. The resulting sample of 75 responses (n = 75, 27%) was comprised of approximately half males (56.9%) and females (43.1%) with an average age of 35.62 years. Sixty-eight percent were new hires, and 32% had transferred from another unit. Participants had been with the organization for an average of 3 years tenure (median = 1 year) and with their respective unit for an average of nine months. According to participant responses, the size of their unit in the organization averaged approximately 16.55 members (median = 9 members).

To conduct analyses at the group level, a decision was made to process responses only if two or more individuals were in a work unit. Eleven groups (n = 11) emerged with the number of newcomers in work units ranging from 2 to 11 members. There were eight units (n = 8)where there was only one respondent. Eight units were therefore not included in the analyses. An examination of included participation showed that they were similar to excluded ones in their sex, age, and tenure.

Procedures and Design

This study involved a two-stage data collection process at the financial company. The first stage involved soliciting participation from newcomers whom had entered their unit in the prior 52 weeks. Newcomers meeting this criterion were contacted by the organization's Human Resource (HR) Department through e-mail and asked to participate in a study benefiting the organization and to open a link to the online survey. Each participant was e-mailed twice, with

the second time acting as a reminder for those who had not completed the survey following the first e-mail. Data collection for all dependent measures was collected during this stage, which took three weeks to complete.

For the second stage, two senior HR personnel rated each of the 36 units on a team effectiveness measure. The organization strategically picked these two individuals to measure unit effectiveness because of their experience and familiarity with each unit's performance. These personnel rated the units jointly over a series of meetings, and their scores were averaged to provide a measure of team effectiveness. Rater scores evidenced acceptable agreement (kappa = .79, 84% raw agreement).

This study contained one (1) independent variable (i.e., unit performance) and eleven (11) dependent variables of interest (see below). Regression analyses were used in order to investigate how well unit performance predicted the dependent variables noted below. Eleven units (n = 11) emerged during data collection and were used in the analyses. Homogeneity of groups was assumed given the study's theoretical rationale, and items were constructed with the unit as the referent (Klein, Dansereau, & Hall, 1994).

Measures

Twelve Likert-type existing survey scales provide the primary measurements in this study. Existing or adapted measures include social support (Campion et al., 1993; Taylor & Bowers, 1972), group potency (Campion et al., 1993), input (Smith, 1962, 1976; Steers, 1973), inclusion (Campion et al., 1993; Steers, 1973; Taylor & Bowers, 1972), ostracism (Ferris et al., 2008), positive feedback (Jaworski & Kohli, 1991), negative output feedback (Jaworski & Kohli, 1991), team standards (Taylor & Bowers, 1972), and leader standards (Taylor & Bowers, 1972), and team performance (Campion et al., 1996). Scales for limited criticism and accountability were developed for this study. All scales were arrayed on 5-point response anchors (1 = Strongly Disagree, 5 = Strongly Agree) except for unit performance, which was arrayed on a 7point anchor (1 = very poor, 7 = outstanding). In keeping with the theoretical dimensions presented earlier, social support, group potency, input, inclusion, ostracism, positive feedback, and limited criticism are associated with Pygmalion. In turn, negative output feedback, team and leader standards, and accountability are associated with normative expectations. In addition, the study measured group cohesion (Seashore, 1954) to assess its potential impact within the Pygmalion and normative expectations frameworks, and participant age, sex, tenure, and unit size.

The dimensionality of each scale was determined using Confirmatory Factor Analyses (CFA). Factor loadings were estimated using the centroid method, and internal consistency and parallelism theorems were used to generate predicated correlations for each of the indicators when applicable (see Hunter & Gerbing, 1982). Assessing the differences between predicted and obtained correlations allowed for the examination of produced residuals. Obtained correlations falling outside sampling error of their predicted correlations were considered to be significant deviations (p < .05). Root mean squared errors (RMSE) and Cronbach's alpha revealed acceptable structural validity and reliability for all scales. Scale items, factor loadings, and reliability coefficients are reported in TABLE 3.

Social Support. To capture positive climate as delineated by Rosenthal (1973), two social support items from Taylor and Bowers (1972) and two warmth and assistant items from Campion et al. (1993) were combined to assess social support. Example items include, "The people in my work are easy to approach," and "Members of my work unit are willing to listen to my problems." Tests of internal consistency (RMSE = .02) and parallelism (RMSE = .07) revealed a good fit of the data to the theoretical construct, and a reliability check indicated

acceptable reliability (α = .92). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Group Potency. In conjunction with social support, group potency was also used as a measure of Rosenthal's (1973) positive climate. Group potency refers to the extent to which individuals believe the team or group will effectively accomplish its goals (Campion et al., 1993). Campion et al.'s (1993) three item Group Potency scale was combined with two new items, "Everyone in my work unit believes that I will do my job well;" "My team believes in me," to bolster the measure of the team's belief in group members. Tests of internal consistency and parallelism revealed a poor fit of the data to the theoretical factor, with discrepancies systematically associated with an item from Campion et al.'s (1993) scale and with one of the newly created items. After removing these items, tests of internal consistency were not possible because the measurement model was just identified. Tests of parallelism revealed modest error rates (RMSE = .10) given the sample size (n = 75), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks indicated acceptable reliability (α = .86). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Input. Input refers to the individual receiving greater amounts of work and harder in difficulty than that being offered to the average person (Rosenthal, 1973). Steers' (1973) Goal Difficulty scale and Smith's (1962, 1976) Amount of Work scale were combined in order to assess the degree of the difficulty of work and amount of work presented to the individual. Example items include "My work objectives will require a great deal of effort from me to complete them" (Steers, 1973) and "I feel that my workload is never too heavy" (Smith, 1962, 1972). Tests of internal consistency and parallelism revealed large residuals associated with an item from each original scale. Upon removal of these items from the measurement model, test

TABLE 3

Factor Loadings for Items and Reliabilities		
Social Support $\alpha = .92$		
The people in my work unit are friendly to me	0.88	
The people in my work unit are easy to approach	0.90	
Members of my team help each other out at work when needed	0.83	
Members of my work unit are willing to listen to my problems	0.84	
<i>Group Potency</i> $\alpha = .86$		
Members of my team have confidence that I can perform effectively	0.88	
Members of my team feel like I can take on any task and complete it	0.78	
Everyone in my work unit believes that I will do my job well	0.82	
My team has a lot of team spirit	-	
My team believes in me	-	
Input $\alpha = .82$		
My work objectives will require a great deal of effort from me to complete them	0.73	
It will take a high degree of skill and know how on my part to attain fully my work objectives	0.81	
My work objectives are quite difficult	0.78	
I should not have too much difficulty in reaching		
my work objectives; they appear fairly easy (R)	-	
I feel that my workload is never too heavy (R)	-	
Inclusion $\alpha = .91$		
My team often discusses things with me	0.87	
My team encourages me to exchange opinions and ideas	0.97	
My team usually asks for my opinions and thoughts when determining the work unit's work objectives	0.84	
Members of team cooperate to get their work done	-	
objectives (R)	-	
I am allowed a high degree of influence in the		
determination of my team's objectives	-	

TABLE 3 (cont'd)

Ostracism $\alpha = .88$	
Others ignore me at work	0.87
Others avoid me at work	0.81
Others at work treat me as if I am not there	0.96
Others at work do not invite me or ask me if I want anything when they go out for a coffee break	0.62
Positive Feedback $\alpha = .97$	
When my team thinks my performance is good, they provide me with positive feedback	0.92
My team lets me know when they think I am producing good results	0.97
When I do a good job, my team makes it a point of mentioning it to me	0.95
When my team is satisfied with my results, they comment about it	0.94
Limited Criticism $\alpha = .94$	
My team goes out of their way to criticize me (R)	0.85
My team picks on me in an unfair way (R)	0.95
Individuals in my work unit look for ways to criticize me (R)	0.96
In general, the negative feedback I receive from my supervisor and coworkers is unfair (R)	-
Leader Standards $\alpha = .92$	
Your supervisor maintains high standards of performance	0.87
Your supervisor sets an example by working hard himself	0.92
Your supervisor encourages others to give their best efforts	0.92
Team Standards $\alpha = .92$	
Your team members maintain high standards of performance	0.92
Your team members encourage others to give their best efforts	0.92
Your team members set an example by working hard themselves	-
Negative Feedback $\alpha = .91$	
My team tells me when they are upset with my performance results	0.77

TABLE 3 (cont'd)	
When my productivity is low, my team brings it to	0.96
my attention	
My team is prompt is letting me know when my	0.92
output is below their expectations	
Accountability $\alpha = .91$	
When I fail to perform well, no one seems to notice (R)	0.92
When I miss my performance target, there are minimal repercussions (R)	0.78
When I fail to meet performance standards, no one	0.00
seems to care (R)	0.96
It is common for people on my team to	_
underperform and get away with it (R)	
Cohesion $\alpha = .87$	
I feel that I really am a part of the workgroup	0.81
If I had the chance to do the same kind of work for	
the same pay, in another workgroup, I would	0.80
Members of my group readily help each other on	
the job	0.90
Members of my group readily get along well with	
each other	0.66
Members of my group readily defend each other	_
from criticism by outsides	-
Members of my readily stick together	-
Unit Performance $\alpha = .91$	
Quality of Work Done	0.86
Productivity	0.74
Completing Work on Time	0.74
Completing Work within Budget	0.66
Providing Innovative Products or Services	0.53
Responding Quickly to Problems or Opportunities	0.78
Job Satisfaction of Members	0.67
Overall Performance	0.89
Initiative of the Group	0.71
Cooperation with Non-Group Members	0.64

of internal consistency were not possible because the measurement model was just identified. Yet, tests of parallelism revealed modest error rates (RMSE = .11), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks were acceptable ($\alpha = .82$). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Inclusion. Team members experience inclusion when they play an important role through providing important contributions and are regularly included in team activities and decision-making activities. Items from Steers' (1973) Participation in Goal-Setting scale, Taylor and Bowers's (1972) Interaction Facilitation scale, and Campion et al.'s (1993) Communication/Cooperation within the Workgroup scale were adapted to form a composite six-item measure of inclusion. Example items include "My team usually asks for my opinions and thoughts when determining the teams work objectives," and "I am allowed a high degree of influence in the determination of my team's objectives" (Steers, 1973). There were six items in total. Tests of internal consistency and parallelism revealed a poor fit of the data to the model. Three items were removed from the measurement model, precluding tests of internal consistency. Tests of parallelism revealed small error rates (RMSE = .08), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks were acceptable (α = .91). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Ostracism. Ostracism is defined as the extent to which an individual feels ignored and excluded from their group (Williams, 2007), and ostracism behaviors run counter to Rosenthal's (1973) theoretical conceptualization of output in Pygmalion conditions. Ostracism items were taken from Ferris et al. (2008). Example items include, "Others ignore me at work," and "Others at work treat me as if I am not there." There were four items in total. Tests of

internal consistency (RMSE = .01) and parallelism (RMSE = .07) revealed small errors, and a reliability check indicated acceptable reliability (α = .88). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Positive Output Feedback. Jaworski and Kohli's (1991) Positive Output Feedback scale was used to measure participant's perception of experiencing praise and example items include, "When my team thinks my performance is good, they provide me with positive feedback," and "When I do a good job, my team makes it a point of mentioning it to me." There were four items in total. Tests of internal consistency (RMSE = .01) and parallelism (RMSE = .06) revealed small errors, and a reliability check indicated acceptable reliability (α = .97). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Limited Criticism. To assess limited criticism, four items were created with the intention of assessing participants' perception that criticism of their work was unfair and extreme. Much criticism is unfairly directed at an individual's personal characteristics. Example items include, "Individuals in my unit look for ways to criticize me," and "In general, the negative feedback I receive from my supervisor and coworkers is unfair." There were four items in total. Tests of internal consistency and parallelism revealed a poor fit of the data to the model. One item was removed from the measurement model, precluding tests of internal consistency. Tests of parallelism revealed small error rates (RMSE = .06), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks indicated acceptable reliability (α = .94). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Leader Expectations. To assess the extent to which a work unit leader has high standards of performance, Taylor and Bowers' (1972) supervisor goal emphasis scale was used. An example item includes, "Your supervisor maintains high standards of performance." There

were three items in total. Because the scale only contained three indicators, tests of internal consistency were not possible because the measurement model was just identified. Tests of parallelism revealed small error rates (RMSE = .08), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks indicated acceptable reliability (α = .92). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Team Expectations. To assess the extent to which a work unit has high standards of performance, Taylor and Bowers' (1972) peer goal emphasis scale was used. An example item includes, "My workgroup maintains high standards of performance." There were three items in total. Initial tests of internal consistency were not possible because at three indicators the model was just identified. Tests of parallelism revealed large residuals, and one item was removed from the analysis. Subsequent tests of parallelism revealed small error rates (RMSE = .06), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks indicated acceptable reliability ($\alpha = .92$). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Negative Output Feedback. Three select items were adapted from Jaworski and Kohli's (1991) Negative Output Feedback scale, and example items include, "My team tells me when they are upset with my performance results," and "when my productivity is low, my team brings it to my attention." There were three items in total. These items are thought to reflect the degree to which others in the group cared about meeting workgroup objectives. When group members care about objectives, they are vocal when a member fails to reach group standards (Gibson & Papa, 2000). Tests of internal consistency were not possible because the measure was comprised of three items. Tests of and parallelism (RMSE = .06) revealed small errors, and a reliability check indicated acceptable reliability (α = .91). Thus, the scale was
judged to exhibit acceptable structural validity and reliability.

Accountability. Accountability refers to the perception of a lack of indifference about the member failing to meet work targets. Four items were created to assess this indifference. Example items include, "When I do not perform well, no one seems to notice," and "When I miss my performance target, there are minimal repercussions." There were four items in total. Tests of internal consistency and parallelism revealed a poor fit of the data to the model. One item was removed from the measurement model, precluding tests of internal consistency. Tests of parallelism revealed small error rates (RMSE = .06), and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks indicated acceptable reliability (α = .91). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Unit Performance. Questionnaires assessing unit performance were given to two human resource personnel to evaluate their own team. Following Campion et al. (1996), unit peformance was determined by a 10 item rating instrument rating referents using seven-point scale anchors (7 = outstanding and 1 = very poor). Example items include, "completing work on time" and "productivity," and scores were averaged across both raters for a unique score for each of the 36 units. Tests of internal consistency (RMSE = .11) revealed modest residuals given the small sample size (n = 36), and the number of significant deviations did not exceed what was expected by chance (p < .05). Further, test of Cronbach's alpha indicated acceptable reliability (α = .91). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

Group Cohesion. Group cohesion may be defined as how attractive the group is perceived to be by its members (Mullen & Cooper, 1994). Group cohesion was measured by adapting (Beehr, 1976; Cammann, Fichman, Jenkins, & Klesh, 1979; Seashore, 1954) a 6-item

measure. Like the other dependent variables, 5-point scale anchors were used. Example items include, "I feel that I really am a part of the workgroup" and "members of my group readily stick together." Tests of internal consistency and parallelism revealed a poor fit of the data to the model, leading to the removal of two items from the measurement model. Subsequent tests of internal consistency (RMSE = .05) and parallelism (RMSE = .08) revealed small error rates, and the number of significant deviations did not exceed what was expected by chance (p < .05). Reliability checks were also acceptable (α = .87). Thus, the scale was judged to exhibit acceptable structural validity and reliability.

CHAPTER 4

RESULTS

This study's theoretical rationale assumes group homogeneity. That is, high and low performing teams are theorized to communicate in specific yet different ways. According to Klein et al. (1994, p. 189), "a theorist predicts that group members are sufficiently similar with respect to the construct in question that they may be characterized as a group." Consequently, measures were created to conform to unit level analysis in order to avoid confounding measurement and attaining clear conclusions (see Ashforth et al., 2007; Klein et al., 1994). In order to illustrate the importance of treating the data at the unit level, individual-level analyses were conducted. Variable means, standard deviations, and correlation coefficients are summarized in TABLE 4. These results were compared to unit level analyses.

In order to generate data for unit level analyses, newcomers were paired with their respective unit, and newcomer means across dependent measures were averaged to form a unit score (Klein et al., 1994). For instance, if a unit had 12 members, calculating the unit 'inclusion value' would require taking each of the 12 members' inclusion mean and averaging those 12 values together. This process was repeated for all dependent measures for all units with at least 2 or more participant responses. Unit level means, standard deviations, and correlation coefficients are reported in TABLE 5.

As evident in comparing results of variable correlations between individual and unit levels, an individual level of analysis leads to attenuated correlations across all dependent measures with the additional reversal of associations between unit performance and group potency (r = -.07) and leader standards (r = .08). These comparisons illustrate how conflicting results may arise in the data if they are not treated in ways that align with how they were theoretically established. These opposing set of findings suggest the presence of a potential

Variable Me	ans, S	tandaı	rd De	viations	s, and C	orrela	ation Co	oefficie	nts, In	dividua	al Leve	el Anal	ysis	
	М	SD	1	2	3	4	5	6	7	8	9	10	11	12
Unit Per.	4.20	1.09												
Social Support	4.24	0.76	.07											
Group Potency	4.25	0.65	07	.44**										
Input	3.40	0.80	08	12	07									
Inclusion	3.83	0.89	08	$.71^{**}$	$.37^{**}$.03								
Ostracism	1.80	0.74	14	65**	- .36**	.21	 48**							
Pos. Feedback	3.73	0.89	- .16	.62**	$.48^{**}$	04	.66**	- .38 ^{**}						
Limited Criticism	4.46	0.67	.12	.41**	$.29^{*}$	24	$.28^*$	- .66**	$.29^{*}$					
Leader Standards	4.26	0.76	.08	$.37^{**}$.22	01	$.35^{**}$	10	$.52^{**}$	$.25^{*}$				
Team Standards	3.96	0.89	.13	$.72^{**}$	$.26^{*}$	03	.56**	 41**	$.63^{**}$.45**	.60**			
Neg. Feedback	3.03	0.80	10	$.39^{**}$.10	02	$.34^{**}$	12	.40**	05	.32**	$.27^{*}$		
Accountability	3.91	0.77	.21	$.30^{*}$.24	.10	.16	24	.43**	.17	.43**	.38**	$.29^{*}$	

TABLE 4

**. Significant at the 0.01 level (2-tailed); *. Significant at the 0.05 level (2-tailed).

Variable M	eans, S	Standa	ard De	eviatio	ns, and	Corre	elation	Coeffic	ients,	Unit L	evel	Analy	vsis	
	М	SD	1	2	3	4	5	6	7	8	9	10	11	12
Unit Per.	4.29	1.23												
Social Support	4.25	.58	.14											
Group Potency	4.28	.25	.14	$.73^{*}$										
Input	3.28	.52	42	52	55									
Inclusion	3.77	.50	20	$.66^{*}$	$.65^{*}$.05								
Ostracism	1.82	.47	38	- .61*	- .84 ^{**}	.43	67*							
Pos. Feedback	3.74	.39	18	$.72^{*}$	$.72^{*}$	46	.46	44						
Limited Criticism	4.44	.39	.34	$.63^{*}$	$.73^{*}$	49	.48	84**	.50					
Leader Standards	4.20	.30	14	.27	.02	.17	.25	- .11	.28	.36				
Team Standards	3.94	.56	.20	$.88^{**}$	$.67^{*}$	47	.56	- .68*	$.67^{*}$	$.86^{**}$.53			
Neg. Feedback	3.07	.40	14	$.68^{*}$.47	41	.22	- .11	.74**	.37	.51	$.65^{*}$		
Accountability	3.99	.49	.35	.21	.06	51	33	.10	.19	.14	.38	.25	$.64^{*}$	

TABLE 5

*Significant at the 0.05 level (2-tailed); ** Significant at the 0.01 level (2-tailed).

c. Listwise N=11

Simpson's paradox (e.g., correlations found at the individual level of analysis are reversed when those individuals are grouped into separate units and the analysis is conducted at the unit level of analysis instead) (see Simpson, 1951). Consequently, analyses were conducted at the unit level in order to establish clearer conclusions. A report of all regression analyses to test the hypotheses is provided in TABLE 6.

The first hypothesis predicted that newcomers on high compared to low performing units would report receiving higher levels of positive group climate in the form of social support and group potency messages. Analyses revealed that unit performance was not a significant predictor of social support ($\beta = .14$, t = 0.42, p = 0.68) or group potency ($\beta = .14$, t =0.41, p = 0.69). The emergent patterns were in the predicted direction, but the relationships were not strong enough to be considered significant.

The second hypothesis predicted that newcomers on high compared to low performing units would report receiving higher levels of input in the form of high levels of workload and work difficulty. Analyses revealed that unit performance was not a significant predictor of levels of input ($\beta = -.42$, t = -1.39, p = 0.20). Of note, the direction of the relationship was opposite of what was predicted, but not significant.

The third hypothesis predicted that newcomers on high compared to low performing units would report receiving higher levels of inclusion in the form of higher levels of engagement from employees and lower instances of being ignored by team members. Analyses revealed that unit performance was not a significant predictor of levels of inclusion ($\beta = -.20$, t= -0.61, p = 0.56) or ostracism ($\beta = -.38$, t = -1.23, p = 0.25). The emerging pattern between unit performance and inclusion was opposite of the predicted direction, but not significant. The negative relationship between unit performance and ostracism was in the predicted direction, but not significant.

Reg	ression Results, Uni	t Level Ar	nalysis		
8	B	SE	β	t	Þ
Social Support	0.07	0.16	0.14	0.42	0.68
Group Potency	0.03	0.07	0.14	0.41	0.69
Input	-0.18	0.13	-0.42	-1.39	0.20
Inclusion	-0.08	0.13	-0.20	-0.61	0.56
Ostracism	-0.15	0.12	-0.38	-1.23	0.25
Positive Feedback	-0.06	0.10	-0.18	-0.54	0.61
Limited Criticism	0.11	0.10	0.34	1.10	0.31
Leader Standards	-0.03	0.08	-0.14	-0.41	0.69
Team Standards	0.10	0.15	0.21	0.63	0.55
Neg. Feedback	-0.05	0.11	-0.14	-0.43	0.68
Accountability	0.14	0.13	0.35	1.11	0.30

The fourth hypothesis predicted that newcomers on high compared to low performing units would report receiving higher levels of feedback in the form of higher levels of positive feedback and lower instances of unfair criticism by team members. Analyses revealed that unit performance did not significantly predict of levels of positive feedback ($\beta = -.18$, t = -0.54, p =0.61) or limited criticism ($\beta = .34$, t = 1.10, p = 0.31). The negative association between unit performance and positive feedback was in the opposite direction then what was predicted, but not significant. Further, although the relationship between unit performance and limited criticism was in the predicted direction, it was not significant.

The fifth hypothesis predicted that newcomers on high compared to low performing units would report being exposed to higher team standards in the form of higher leader and unit member standards. Analyses revealed that unit performance was not a significant predictor of leader standards ($\beta = -.14$, t = -0.41, p = 0.69) or team standards ($\beta = .21$, t = 0.63, p = 0.55). The negative relationship between unit performance and leader standards was in the opposite direction of what was predicted, but not significant. The positive relationship between unit performance and team standards was in the predicted direction, but not significant.

The sixth hypothesis predicted that newcomers on high compared to low performing units would report experiencing high levels of negative feedback. The analysis revealed that unit performance was not a significant predictor of negative feedback ($\beta = -.14$, t = -0.43, p =0.68), and the emerging pattern between unit performance and negative feedback was in the opposite direction of what was predicted, but not significant.

The seventh hypothesis predicted that newcomers on high compared to low performing units would report experiencing high levels of accountability from members in their unit. The analysis revealed that unit performance was not a significant predictor of accountability (β = .35, t = 1.11, p = 0.30). The pattern between unit performance and accountability was in the predicted direction of what was predicted, but not significant.

Group cohesion has historically played an important role in the workgroup literature. Past studies have found group cohesion to be an important indicator of group productivity (e.g., Berkowitz, 1954). Recent meta-analytic findings support this notion by finding positive associations between unit performance and cohesion, especially when members are committed to their task (see Mullen & Cooper, 1994).

Thus, in addition to exploring the relationship of work unit performance with incumbents' expectations, this study posed a research question inquiring into the relationship between group cohesion and Pygmalion and normative expectation frameworks, and unit performance. Correlation analyses indicate that group cohesion showed little association with unit effectiveness. However, group cohesion was highly correlated to a number of Pygmalion elements, including inclusion (r = .67) and group potency (r = .67) (Campion, 1993), positive feedback (r = .78) (Cusella, 2001), and limited criticism (r = .67) and ostracism (r = ..55) (Ferris

et al., 2008; Rosenthal & Harris, 1985). Analyses also indicate that group cohesion was highly correlated with important normative expectation messages of leader standards (r = .55), team standards (r = .89), negative feedback (r = .79), and accountability (r = .27). Variable means, standard deviations, and correlation coefficients are summarized in TABLE 7.

						INDL									
	Variable Means, Standard Deviations, and Correlation Coefficients, Group Cohesion														
	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	1
Group Coh.	3.91	0.47													
Unit Per.	4.29	1.23	.02												
Social Support	4.25	0.58	.93**	.14											
Group Pot.	4.28	0.25	$.67^{*}$.14	$.73^{*}$										
Input	3.28	0.52	32	42	52	55									
Inclusion	3.77	0.50	$.67^{*}$	20	$.66^{*}$	$.65^{*}$.05								
Ostracism	1.82	0.47	54	38	- .61*	- .84 ^{**}	.43	67*							
Pos. Feed.	3.74	0.39	$.78^{**}$	18	$.72^{*}$	$.72^*$	46	.46	44						
Limited Crit.	4.44	0.39	.61*	.34	$.63^{*}$	$.73^{*}$	49	.48	84**	.50					
Leader Stand.	4.20	0.30	.55	14	.27	.02	.17	.25	11	.28	.36				
Team Stand.	3.94	0.56	$.89^{**}$.20	$.88^{**}$	$.67^{*}$	47	.56	- .68*	$.67^{*}$.86**	.53			
Neg. Feed.	3.07	0.40	$.79^{**}$	14	$.68^{*}$.47	41	.22	- .11	$.74^{**}$.37	.51	$.65^{*}$		
Accountability	3.99	0.49	.27	.35	.21	.06	51	33	.10	.19	.14	.38	.25	$.64^{*}$	
*Significant at th	e 0.05 lev	el (2-taile	ed); **Sig	gnificar	nt at the	0.01 lev	el (2-tai	iled).							

TABLE 7

Listwise N=11

CHAPTER 5

DISCUSSION

Exploring workgroup socialization processes can provide important insights and increased understanding regarding how newcomers adjust to their organization and job while learning their respective roles (Feldman, 1981; Jablin, 2001). Research suggests that it is within the context of the work unit that newcomers learn their roles, develop social connections, obtain support from others, and form their identities (Jablin, 2001; Ostroff & Kozlowski, 1992). Workgroup members are known at times seek to shape and mold new hires to low or high levels of performance, with the suppression of new hire productivity being the most widely understood (Cohen & Bailey, 1997; Roethlisberger & Dickson, 1939; Zurcher, 1983).

Despite several decades of socialization research, the processes by which workgroups enact communicative behaviors meant to increase newcomer performance remain unclear. For instance, research by Chen and Klimoski (2003) finds that newcomers confronted with high team expectations perform better than those confronted with low team expectations. Chen (2005) further finds that newcomers placed on high performing teams perform better than those placed on low performing teams. Though not measured in those studies, their findings imply that high and low performing teams may be communicating their expectations and productivity norms differently to newcomers. To extend the research of Chen and Klimoski (2003) and Chen (2005) and examine the role of messages on development of newcomer expectations, this study investigated communicative patterns on high and low performing workgroups with their newcomers.

Summary of Results.

This study was guided by research on Pygmalion and normative expectancy effects, which have shown to influence employee performance. It was hypothesized that high

performing workgroups engaging in Pygmalion-like behaviors produce messages characterized by high levels of social support and group potency, input, positive feedback and inclusion, in addition to low levels of ostracism and criticism. Conversely, it was further hypothesized that high performing workgroups communicating normative expectations communicate messages conveying high team and leader standards, negative feedback, and accountability. Analyses revealed emergent patterns in both predicted and opposite directions, but none that reached statistical significance. Hence, none of the hypotheses were statistically supported.

When examining the overall pattern of relationships, preliminary analyses indicate that newcomers on high performing workgroups reported receiving and experiencing more social support ($\beta = .14$) and group potency ($\beta = .14$), and lower instances of criticism ($\beta = .34$) and ostracism ($\beta = -.38$). Interpersonally warm atmospheres characterized by supportive, inclusive, and efficacious climates are essential for high levels of individual and unit performance (Stajkovic et al., 2009), and findings herein suggest that these characteristics are present in this organization's high performing work units. For example, social support, a general positive atmosphere with messages of friendliness and warmth directed at the individual (Jablin, 2001; Redding, 1972), group potency, a consistent positive outlook concerning group outcomes (Campion et al., 1993), limited criticism, few instances of unfair criticism (Harris & Rosenthal, 1985), and scant ostracism, being ignored by others in the workplace (Ferris et al., 2008), contribute to constructive work environments where newcomers are less likely to be subject to unwarranted or irrelevant personal criticism and hostility. The socially constructed climate in high performing workgroups is in line with Rosenthal's (1973; Harris & Rosenthal, 1985) conceptualization of environments as conducive to individual development and with those reported by other researchers (Jablin, 1987, 2001; Van Maanen & Schein, 1979).

Newcomers entering high performing units also reported being confronted with feedback messages conveying strict accountability ($\beta = .35$) and high team expectations ($\beta = .21$). Accountability, a lack of indifference about members failing to meet work objectives (Jones, 1984), and high team expectations, strong peer goal emphasis, are fundamental elements in establishing and enforcing normative expectations (Barker, 1993; Gibson & Papa, 2000; Locke, 2004; Shaw, 2004). Although speculative in nature due to the preliminary nature of the findings, the presence of inclusive, yet demanding environments suggests that Pygmalion and normative expectations may act concurrently in some high performing units. It is clear that more data and larger sample sizes are needed to increase confidence in these findings.

A number of relationships emerged in a direction opposite of what was predicted. Although they failed to meet the criteria needed for statistical significance, they are considered here. First, the negative relationship between unit performance and input ($\beta = -.42$) suggests that newcomers on high performing teams perceive their workload to be less difficult than those on low performing teams. It is possible that newcomers on high performing units are not assigned much difficult work during the first few months of employment. Because of the focus on learning in early socialization periods (Kramer, 2010; Moreland & Levine, 2001), newcomers may attend to learning the ropes and low difficulty tasks before being assigned high priority tasks that are higher in difficulty (Ziller, 1965). In line with this reasoning, negative relationships found between unit performance and negative feedback ($\beta = -.14$), positive feedback ($\beta = -.18$), and inclusion ($\beta = -.20$) suggest that if newcomers are given easier work, then significant amounts of feedback of any sort may not be necessary for newcomers to complete their tasks. Alternatively, high performing teams in this organization may strategically ease newcomers into increasingly more difficult assignments. Pacing new hire development in incremental steps creates a much different learning environment in comparison

to sink-or-swim ones where the probability for initial failure is great (Van Maanen & Schein, 1979; Zurcher, 1983). Conversely, high performing teams may have a harder time trusting their newcomers with important tasks (Moreland & Levine, 2002), thus potentially explaining why incumbents entering high performing teams are provided with work that is lower in difficulty, in addition to being excluded from important task-related conversations where opinions are solicited from adjacent group members. Additional research is needed to investigate these patterns in order to shed light on these competing explanations.

Findings from this study also indicate that group cohesion is worthy of consideration when studying the role of Pygmalion and normative expectations during workgroup socialization. Future investigators, however, need to carefully consider the causal nature underlying the strong associations reported here given the correlational nature of the data (see Davis, 1985). If, for instance, group cohesion is defined as how attractive members perceive their groups to be (Berkowitz, 1954; Mullen & Cooper, 1994), then one must question whether group cohesion is the result of constructive climate, as delineated by Rosenthal (1973; Harris & Rosenthal, 1985), and normative expectancy behaviors (Barker, 1993; Gibson & Papa, 2000), or if the opposite is the case. Logically, both explanations are plausible. Future research would do well to study these effects longitudinally in order to establish the temporal order needed to better understand the role of group cohesion during workgroup socialization. Alternatively, the strong associations documented here could very well be an artifact of self-report measures correlating highly with one another. Make note of how group cohesion is highly correlated with all self-report measures (Schmitt & Klimoski, 1991), but not with the objective based measure of unit performance. Competing explanations suggest that the affect captured in the measure of group cohesion be thoroughly investigated when examining work unit socialization processes.

In considering the role of cohesion within the Pygmalion and normative expectation frameworks presented thus far, distinguishing between social and task cohesion may also prove beneficial and provide additional avenues for empirical research. Unlike social cohesion, task cohesion was not considered in this study. Task cohesion, defined as the collective bonding surrounding the unit's task (Eys & Carron, 2001), has been linked with increases in performance effort (Doherty & Carron, 2003), higher role clarity (Eys & Carron, 2001), and adherence to the task (Carron, Hausenblas, & Mack, 1996). Given these relationships, it is logical to reason that task cohesion may be of particular import in terms of understanding the role of key Pygmalion and normative expectation factors such as team expectations, accountability, and both positive and negative feedback, etc. Allowing task cohesion to run parallel to social cohesion when investigating the Pygmalion and normative expectations frameworks may further help increase the current state of understanding social scientists have of the socialization process.

Theoretical Implications

The Pygmalion and normative expectation hypotheses are presented in this study in a way that suggests competition between the two (i.e., Pygmalion units give positive feedback, whereas normative expectation units give negative feedback). Yet, the data indicate that both may occur concurrently within units. Findings here suggest that unit members may limit their unfair criticism of newcomers (i.e., limited criticism), all the while putting pressure on the newcomer when they appear to be slacking (i.e., accountability). Thus, a fine line may exist between Pygmalion and normative expectation messages, and high performing units may alternate emphasizing those message properties. A brief treatment of Pygmalion and normative expectation messages in workgroup socialization acting in concert is given here.

Consider an instance in which both Pygmalion and normative expectation messages are commonplace in a high performing unit. In some ways, supervisors and coworkers enacting Pygmalion effect and normative expectation messages offer the best of both worlds to newcomers, given that both approaches stress high performance. The climate in this setting is supportive, messages are developmental and personally challenging, the expectations for performance are clear, and newcomers find that they are held accountable for their performance. Using Van Maanen and Schein's (1979) terminology (and following Saks et al., 2007, meta-analytic results), investiture and serial people processing tactics provide warm environments and available coach-like figures. The warmth is balanced by goals that are demanding or "stretching" in nature (Locke, 2004; Shaw, 2004) with incumbents who do not shy away from the utilization of corrective feedback (Gordon & Miller, 2012). This combination prevents shirking, but also facilitates the adoption of strong team performance norms and expectations (Barker, 1993).

In high performing units where socialization rests primarily on normative expectation messages, newcomers' entry is likely to be marked by intense and corrective feedback. Certainly, strong unit standards are integral to increasing member performance (Chen & Klimoski, 2003; Hackman, 1992). A strength of this approach rests in newcomers' knowledge of where they stand at all times vis-à-vis their performance. However, the lack of balance associated with social support and individual development (i.e., key elements in the Pygmalion effect) may lead newcomers and others to feelings of unfairness and frustration, resulting in psychological or physical reactance (Lawrence & Robinson, 2007; Zurcher, 1983). Even with socially supportive messages and carefully constructed feedback (Druskat, Sala, & Mount, 2006), newcomers may perform at high levels only as long as concertive control conditions are present (Barker, 1993; Gibson & Papa, 2000).

In high performing units where socialization rests primarily on Pygmalion-like messages, newcomers are likely to experience warm environments of inclusion, involvement, and frequent personal challenge. Positive social support is essential for newcomer adjustment (Saks et al., 2007), and positive feedback can increase individuals' intrinsic motivation to perform (Cusella, 2001). Further, personal as well as unit self-belief in the likelihood of success are strong predictors of high performance levels (Campion et al., 1993; Stajkovic et al., 2009). However, it is not uncommon for individuals and units to have inflated perceptions of their productivity and value and miss their performance targets without corrective feedback (Gordon & Miller, 2012). Moreover, established units can languish without facing stretch goals, which can require major changes in planning, processes, and motivation (Shaw, 2004). As high performing teams are more ambitious and have higher expectations than other teams (Katzenbach & Smith, 1993), these teams may give special attention to newcomer coaching and development (Brown & Sitzmann, 2011).

Finally, it is possible, at least temporarily, that high performing work units exist where uniform Pygmalion effect or normative expectation messages are largely absent. Newcomers entering environments lacking a uniform culture may experience a mixture of warm, indifferent, and distant greetings, typical of many work settings (Sias, 2009). They may even encounter settings where incumbents are interpersonally cold until newcomers prove themselves in some way (Van Maanen & Schein, 1979; Ziller, 1965; Zurcher, 1983). Although the lack of Pygmalion effect or normative expectation characteristics would seem to undermine their unit performance ability, work units may retain high performance levels by simply hiring those with motivation and proven abilities (Kristof-Brown et al., 2005). This approach may more closely resemble a collection of high priced free agents, who come and go and invest little in unit culture or socializing newcomers (Keidel, 1984). Professional sports teams and even

some academic units operate on this model, where motivated, high ability personnel enable the unit to make profitable margins and where newcomers sink or swim much without the aid of others.

In attempting to understand the role of Pygmalion within workgroups and its potential to increase performance, considering the role of social support may be a prudent move on the part of future researchers (see Saks et al., 2007). In assessing the various dimensions of workgroup Pygmalion posited here (e.g., positive feedback, group potency, input, etc.), it is worth mentioning that all hint at the importance of support. Inclusion of members, for example, may allow for instances in which members actively reduce newcomer role ambiguity and increase task knowledge, both of which are integral to increasing performance (Bauer et al., 2007; Locke, 2000). Further, willingness of others to convey messages of belief in addition to the provision of positive feedback and warm welcome may lead to climates that foster coachlike figures which provide support in ways that increase role clarity and performance (Brown & Sitzmann, 2011; Saks et al., 2007). Because newcomers are surrounded by their immediate peers upon entering the workgroup (Jablin, 2001; Kramer, 2010), it is only reasonable to speculate that engagement of incoming incumbents from other members is needed for the provision of integral resources and successful stimulation of performance. Exploring the role of other support during workgroup socialization may be crucial to understanding this process (Saks et al., 2007).

Conversely, in attempting to understand the role of normative expectations within workgroups, understanding how communication is used to create a sense of pressure and accountability may help explain why newcomers make the additional effort needed to meet stringent performance standards (Barker, 1993; Gibson & Papa, 2000). Like support, assessing the various factors purported to constitute normative expectations indicates that accountability may be a common denominator across all factors (i.e., team and leader expectations, accountability, and negative feedback). The extent to which workgroups are able to communicate intense normative pressure clearly and ordain pertinent sanctions for not meeting the required expectations may be integral to setting the tone needed to motivate newcomers to perform well and become a functional asset through the completion of rigorous goals and attainment of high performance standards (Chen & Klimoski, 2003; Hackman, 1992; Jackson, 1966; 1975; Lapinksi & Rimal, 2005; Locke, 2004; Shaw, 2004). Performing at high levels in front of newcomers may communicate the normative atmosphere with which newcomers are expected to perform at (Katz & Kahn, 1978). Additionally, messages of corrective feedback (Gordon & Miller, 2012) and accountability may be needed to delineate peripheral versus important tasks; inherently indicating which tasks must be done if newcomers plan on surviving.

As the preliminary results of this study indicate, however, workgroups may need to walk a tight rope in terms of finding a delicate balance between normative pressure and workgroup support. It is easy to envision situations in which too much warm welcome may lead to a lackadaisical environment in which levels of productivity are allowed to dwindle without much repercussion (Gordon & Miller, 2012); or, conversely, situations in which asking too much of members without the provision of material or psychological reward may leave them feeling as if they are being abused and/or treated unfairly (Lawrence & Robinson, 2007).

Limitations and Strengths

Analyzing data at the unit level of analysis offers opportunities to advance the understanding of socialization within work groups. The hypotheses were forwarded under the assumption that units would be homogeneous with respect to the constructs under investigation (i.e., high and low performing teams would communicate in very specific yet

different ways), and subsequent measures were also constructed in order to conform to the respective level of interest (i.e., the work unit). Constructing measures that place the focus of the items on the unit of interest is an important task to complete if investigators hope to avoid confounding measurement (see Ashford et al., 2007; Klein et al., 1994). For instance, Riddle, Anderson, and Martin (2000) purport to examine the extent of workgroup influence but instead focus on individual adjustment outcomes. In this instance, the influence of the workgroup on group members is unclear. Thus, the creation of measures meant to focus on the correct level of analysis may be considered one of the key strengths of this study.

Assuming group homogeneity, however, without using the appropriate statistics (e.g., intra-class correlations, etc.) needed to justify homogeneity within groups is a crucial limitation. If future empirical investigations desire to reach clear conclusions when conducting workgroup research, then focus should be placed on creating measures that conform to the level of desired theory in addition to aligning levels of theory with the correct form of data analysis (see Klein et al., 1994; Klein & Kozlowski, 2000). The findings of this study should thus be approached with caution.

Inherent in analyzing data at the unit level is the reduction of statistical power, and the small sample used in this study is an additional limitation. Statistical power is defined as the probability of rejecting the null hypothesis $(1 - \beta)$. Sample size is a key determinant of power (i.e., effect sizes and alpha being the other two). Mathematically, an increase in sample size leads to an increase in power, which subsequently increases the probability of successfully rejecting the null hypothesis. Put differently, a decrease in sample size subsequently reduces statistical power and the probability of correctly rejecting the null hypothesis (Cohen & Cohen, 2003; Levine, Asada, & Carpenter, 2009). When grouping newcomers into their respective units for the purposes of this study, a mere 11 units emerged (n = 11). Given the sensitivity of power

and statistical significance to sample size (Cohen & Cohen, 2003), if it were to be assumed that the effect sizes attained in this study were population effect sizes, then hypothetical poweranalyses would indicate that the current study is severely underpowered with power ranging from .06 to around .19 at the two-tailed level. Outright rejection of the hypotheses proposed in this study may thus be a precipitous matter if the rejection is based on a mere lack of statistical significance. Increasing power via conducting a one-tailed correlational analysis (i.e., increasing alpha) showed that many of the probabilities found in the regression table were cut in half, in fact indicating that an additional 20 to 30 units may have sufficed to claim statistical significance on many of the relationships proposed. Because low power blurs statistical conclusions validity (Cohen & Cohen, 2003; Hunter, 1997; Levine et al., 2009), future research may benefit from an increase in sample size (Cohen & Cohen, 2003) when assessing the impact of unit influence during workgroup socialization.

Focusing on the communication patterns across high and low performing teams was integral to the exploration of potential mediating mechanisms responsible for the effects of team expectations on newcomer performance and can be considered to be one of the strengths of this study. For instance, although Chen and Klimoski (2003) cite the Pygmalion effect as a potential explanation for their findings, they fail to measure the communicative behaviors associated with Pygmalion effects (Rosenthal, 1994). Without directly measuring their respective communication behaviors, Chen and colleague's claims of Pygmalion effects could be considered presumptuous. Whereas Chen and Klimoski may assume Pygmalion, others may assume person-job fit (Kristof-Brown et al., 2005), managerial coaching (Brown & Stizmann, 2011), and/or concertive control (Barker, 1993; Gibson & Papa, 2000). In failing to explore the relevant mediating mechanisms, our understanding and ability to explain and place confidence in our explanations of various phenomena in the social sciences remains limited (Rosenthal, 1994). By the same token, however, a related limitation of this study was the failure to verify that newcomers assigned to high performing teams were performing at high levels as well as to rule out competing explanations for their high performance. Although potential mediating mechanisms meant to lend credence to Pygmalion and normative expectancy effects were proposed in this study, labeling them as mediators may not be prudent until possible to test for their effects on individual performance. Future research assessing the impact of workgroup effectiveness would benefit from measuring individual and unit performance in addition to measuring the variables stemming from the unit that help explain variations in individual performance.

Despite the study's inability to establish statistical mediation, the creation of scales meant to capture Pygmalion and normative expectancy processes should nonetheless be considered an additional strength of this study. Allowing nomological networks to immerse and subsume the various factors found within the Pygmalion and normative expectation frameworks with other adjacent, integral factors (e.g., newcomer performance) would provide additional credence to the concepts of Pygmalion and normative expectations via indications of construct validity (see Cronbach & Meehl, 1955), thus increasing confidence in the assorted explanations meant to shed light on team processes.

Future Research

This investigation provides a number of avenues for future research that hold potential value to the study of workgroup socialization. One avenue that should be considered involves the addition of individual performance measures. Rosenthal's (1973) four-factor model and subsequent meta-analysis (Harris & Rosenthal, 1985) posits a causal relationship proposing that high expectations lead to certain types of communication, which subsequently leads to increases in performance. Measures of individual performance in concert with assessments of

Pygmalion and normative expectation messages may help shed light on how high performing teams spur newcomer performance during the critical period of newcomer socialization (see Jablin, 2001). For example, linkages to performance can help explain how Pygmalion and normative expectation-type messages vary as newcomers demonstrate (or fail to demonstrate) initial competencies and improvement over the first few months in the workgroup.

Interestingly, in considering Rosenthal's (1973) four-factor model, it becomes clear that future workgroup socialization scholars would also benefit from thinking critically about the assumptions of the theory and the levels of analysis it can be reasonably applied to. Given the characteristics commonly evidenced by high performing work units (see Katzenbach & Smith, 1993; LaFasto & Larson, 2001), it seemed plausible to assume homogeneity within groups (see Klein et al., 1994) when considering the role of Pygmalion and normative expectations in the workgroups. Put differently, this study not only attempted to extend Rosenthal's (1973) fourfactor model to the workgroup socialization context, but also to a different level of abstraction (i.e., the unit level). Although potentially useful and insightful, variance at the within subjects level should also be considered when considering Pygmalion and normative expectations during workgroup socialization in two respects. First, Rosenthal's (1973) four-factor model may not be applicable or generalize to the unit, in which case individual-level analyses may be more illuminating. Second, homogeneity may not apply to all teams, especially where new hires in high quality or in-group relationships (Klein et al., 1994) benefit from additional coaching or inside information while other newcomers do not receive the same advantages.

When considering the various possibilities and implications of Pygmalion and normative expectations in the workgroup, future research would also do well to consider the hypothesized relationships in a longitudinal manner. Because causation cannot be inferred from correlational data, longitudinal data is needed to establish temporal order (Davis, 1985).

Further, longitudinal investigations may also provide a better understanding of how the current variables of interest operate over time (Collins & Sayer, 2000; Monge, 1990). For instance, the inverse relationship between input and unit performance (r = -.42) may reverse as incumbent tenure increases (e.g., as newcomers become trusted members, they are presented with tasks of greater difficulty over time). Because socialization is a process (Feldman, 1981; Jablin, 2001; Kramer, 2010; Ostroff & Kozlowski), social scientists wishing to garner a better understanding of socialization must establish pertinent dynamic processes and temporal patterns integral to newcomer adjustment. It understandably follows that longitudinal data is a fundamental supplement to the various static, cross-sectional data collected thus far on the process of socialization (for discussions on longitudinal design and pertinent statistical analyses, see Arrow, Henry, Poole, Wheelan, & Moreland 2005; Collins & Sayer, 2000; Monge, 1990).

CHAPTER 6

CONCLUSION

A focus on communication within the workgroup context affords greater specification of what socialization experiences are primarily like at the organizational, unit, and individual levels (Ashforth et al., 2007). Greater attention to communication events, acts, and experiences at the unit level may also provide greater understanding of the interplay between the various levels (Miller et al., 2011) and of their unique contributions to newcomer development of role learning (Jablin, 2001), role adjustment (Kramer, 2010) and identity (Scott, Corman, & Cheney, 1998). At this writing, measures of socialization tactics, content, and memorable experiences are entwined and their unique contributions are difficult to discern. Future research of workgroup communication socialization is likely to require both the creation of constructs and items specifically designed to measure unit level phenomenon, broader sampling, and following of level of analysis protocols for testing of unit level effects. In terms of the construct specification and item creation, investigators will need to develop items that address communication events occurring in the work unit setting as opposed to messages from or events sponsored by top management or Human Resource personnel (Schmitt & Klimoski, 1991). Certainly, a more thorough understanding of the mechanisms operating at the work unit level is integral to the exploration of newcomer socialization.

This study sought to empirically capture the mediating mechanisms of Pygmalion and normative expectation effects, as these effects are commonly cited as being responsible for unit performance and productivity standards in workgroup socialization. Although non-significant findings emerged, patterns indicate that both Pygmalion and normative expectancy messages occur and are communicated concurrently within units, which differ from past explanations in the literature. For example, past studies (see Eden, 1990) claiming Pygmalion effects as

responsible for expectation effects may fail to place due importance on normative pressures that may also be present in contexts associated with Pygmalion-type messages (e.g., high accountability found within socially supportive environments, etc.). Moreover, preliminary results suggest that high performing teams seem to be placing greater emphasis on toning down the criticism, ostracism, and difficulty of work, all the while presenting their newcomers with strong team standards and high levels of accountability. Whether or not these patterns change over the course of the socialization period is a question worthy of empirical investigation. It is clear that research focusing on the exploration of mediating mechanisms responsible for common social scientific phenomena is needed, in addition to analyzing data at the correct level of analysis in longitudinal fashion, if we are to better understand the workgroup socialization process. REFERENCES

REFERENCES

- Allen, D. G. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? (2006). *Journal of Management*, 32, 237-256.
- Allen, N. J., & Meyer, J. P. (1990). Organizational socialization tactics: Longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal*, 33, 847-858.
- Argyle, M. (1972). The social psychology of work. New York: Taplinger Publishing Company.
- Arrow, H., Henry, K. B., Poole, M. S., Wheelan, S., Moreland, R. (2005). Traces, trajectories, and timing: The temporal perspective on groups. In M. S. Poole & A. B. Hollingshead (Eds.), *Theories of small groups: Interdisciplinary perspectives* (pp. 313-367). Thousand Oaks, CA: Sage.
- Ashford, S. J. (1986). The role of feedback seeking in individual adaptation: A resource perspective. *Academy of Management Journal*, 29, 465-487.
- Ashforth, B. E., & Saks, A. M. (1996). Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal*, 39, 149-178.
- Ashforth, B.E., Sluss, D.M., & Harrison, S.H. (2007). Socialization in organizational contexts. In G.P. Hodgkinson & J.K. Ford (Eds.), *International review of industrial and organizational* psychology, vol. 22: 1-70. Chichester, UK: Wiley.
- Barge, K. J., & Schlueter, D. W. (2004). Memorable messages and newcomer socialization. *Western Journal of Communication*, 68, 233-256.
- Barker, J. R. (1993). Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38, 408-437.
- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M., & Tucker, J. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 3, 707-721.
- Beerh, T. A. (1976). Perceived situational moderators of the relationship between subjective role ambiguity and role strain. *Journal of Applied Psychology*, *61*, 35-40.
- Berkowitz, L. (1954). Group standards, cohesiveness, and productivity. *Human Relations*, 7, 509-519.
- Berlew, D. E., & Hall, D. T. (1966). The socialization of managers: Effects of expectations on performance. *Administrative Science Quarterly*, 11, 207-223.

- Brophy, J. E. (1983). Research on the self-fulfilling prophecy and teacher expectations. *Journal* of Educational Psychology, 75, 631-661.
- Brown, K. G., & Sitzmann, T. (2011). Training and employee development for improved performance. In S. Zedeck (Ed.), APA handbook of industrial and organizational psychology (pp. 469-503). Washington, DC: APA.
- Burgoon, J. K. (1978). A communication model of personal space violations: Explication and an initial test. *Human Communication Research*, *4*, 129-142.
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. Unpublish Manuscript, University of Michigan, Ann Abor, Michigan.
- Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, 46, 823-850.
- Campion, M. A., Papper, E. M., & Medsker, G. J. (1996). Relations between work team characteristics and effectiveness: A replication and extension. *Personnel Psychology*, 49, 429-452.
- Carron, A. V., Hausenblas, H. A., & Mack, D. (1996). Social influence and exercise: A metaanalysis. Journal of Sports & Exercise Psychology, 18, 1-16.
- Chao, G. T., O'Leary-Kelly, A. M., Wolf, S., Klein, H. J., & Gardner, P. D. (1994). Organizational socialization: Its content and consequences. *Journal of Applied Psychology*, 79, 730-743.
- Chen, G. (2005). Newcomer adaptation in teams: Multilevel antecedents and outcomes. *Academy of Management Journal, 48,* 101-116.
- Chen, G., & Klimoski, R. J. (2003). The impact of expectations on newcomer performance in teams as mediated by work characteristics, social exchanges, and empowerment. *The Academy of Management Journal*, *46*, 591-607.
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, 23, 239-290.
- Cohen, J., & Cohen, J. (2003). Applied multiple regression/correlation analysis for the behavioral sciences. Mahwah, N.J: L. Erlbaum Associates.
- Collins, L. M., & Sayer, A. C. (2000). Modeling growth and change processes: Design, measurement, and analysis for research in social psychology. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 478-495). New York, NY: Cambridge University Press.

Collinson, D. L. (1992). Managing the shopfloor: Subjectivity, masculinity, and

workplace culture. Berlin: Walter de Gruyter & Co.

- Cooper-Thomas, H. D., & Anderson, N. (2006). Organizational socialization a new theoretical model and recommendations for future research and HRM practices in organizations. *Journal of Managerial Psychology*, *21*, 492-516.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-302.
- Cusella, L. P. (2001). Feedback, motivation, and performance. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An interdisciplinary perspective* (pp. 624-678). Thousand Oaks, CA: Sage.
- Davis, J. A. (1985). The Logic of Causal Order. Beverly Hills, CA: Sage.
- Doherty, A. J., & Carron, A. V. (2003). Cohesion in volunteer sport executive committees. Journal of Sport Management, 17, 116-141.
- Druskat, V. U., Sala, F., & Mount, G. (2006). Linking emotional intelligence and performance at work: Current research evidence with individuals and groups. Mahwah, NJ: Lawrence Erlbaum.
- Eden, D. (1990). *Pygmalion in management: Productivity as a self-fulfilling prophecy.* Lexington, Mass: Lexington Books.
- Eden, D., & Ravid, G. (1982). Pygmalion versus self-expectancy: Effects of instructor and selfexpectancy on trainee performance. *Organizational Behavior and Human Performance*, 30, 351-364.
- Eden, D., & Shani, A. B. (1982). Pygmalion goes to boot camp: Expectancy, leadership, and trainee performance. *Journal of Applied Psychology*, 67, 194-199.
- Eys, M. A., & Carron, A. V. (2001). Role ambiguity, task cohesion, and task self-efficacy. *Small Group Research*, 32, 356-373.
- Feldman, D. C. (1976). A contingency theory of socialization. *Administrative Science Quarterly*, 21, 433-452.
- Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). *Journal of Applied Psychology*, 93, 1348-1366.
- Gibson, M. K., & Papa, M. J. (2000). The mud, the blood, and the beer guys: Organizational osmosis in blue-collar work groups. *Journal of Applied Communication Research, 28*, 68-88.
- Glynn, C. J., & Huge, M. E. (2007). Opinion as norms: Applying a return potential model to the study of communication behaviors. *Communication Research*, 34, 548-568.

Gordon, M. E., & Miller, V. D. (2012). Conversations about job performance: A communication

perspective on the appraisal process. New York, NY: Business Expert Press.

- Hackman, R. J. (1992). Group influences on individuals in organizations. In M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (199-267). Palo Alto, CA: Consulting Psychologists Press, Inc.
- Harris, M. J., & Rosenthal, R. (1985). Mediation of interpersonal expectancy effects: 31 metaanalyses. *Psychological Bulletin*, 97, 363-386.
- Hunter, J. E., & Gerbing, D. W. (1982). Unidimensional measurement, second order factor analysis, and causal models. *Research in Organizational Behavior*, *4*, 267-320.
- Hunter, J. E. (1997). Needed: A ban on the significance test. Psychological Science, 8, 3-7.
- Jablin, F. (1987). Organizational entry, assimilation, and exit. In F. M. Jablin, L. L. Putman, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication* (pp. 679-740). Beverly Hills, CA: Sage.
- Jablin, F. M. (2001). Organizational entry, assimilation, and disengagement/exit. In F. M. Jablin, & L. L. Putnam (Eds.), *The new handbook of organizational communication: Advances in theory, research, and methods* (pp. 732-818). Thousand Oaks, CA: Sage.
- Jackson, J. (1966). A conceptual and measurement model for norms and roles. *The Pacific Sociological Review*, 9, 35-47.
- Jackson, J. (1975). Normative power and conflict potential. Sociological Methods & Research, 4, 237-263.
- Jaworski, B. T., & Kohli, A. K. (1991). Supervisory feedback: Alternative types and their impact on salespeople's performance and satisfaction. *Journal of Marketing Research*, 28, 190-201.
- Jones, G. R. (1984). Task visibility, free riding, and shirking: Explaining the effect of structure and technology on employee behavior. *The Academy of Management Review*, 9, 684-695.
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal*, 29, 262-279.
- Katz, D., & Kahn, R. L. (1978). The social psychology of organizations. New York: Wiley.
- Katzenbach, J. R., & Smith, D. K. (1993). The wisdom of teams: Creating the highperformance organization. Boston, MA: Harvard Business School Press.
- Kierein, N. M., & Gold, M. A. (2000). Pygmalion in work organizations: a meta-analysis. Journal of Organizational Behaviour, 21, 913-928.
- Keidel, R. W. (1984). Football, baseball, and basketball: Models for business. Organizational Dynamics, 13(2), 5-18.

- King, A. S. (1971). Self-fulfilling prophecies in training the hard-care: Supervisors' expectations and the underprivileged workers' performance. *Social Science Quarterly*, *52*, 369-378.
- King, A. S. (1974). Expectation effects in organizational change. *Administrative Science Quarterly*, 19, 221-230.
- Knapp, M. L., Stohl, C., & Reardon, K. K. (1981). "Memorable" messages. *Journal of Communication*, 31, 27-41.
- Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection, and analysis. *Academy of Management Review*, 19(2), 195-229.
- Klein, K. J., & Kozlowski, S. W. J. (2000). Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions. San Francisco: Jossey-Bass.
- Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organizations. In
 W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology* (pp. 333-375).
 Hoboken, NJ: John Wiley & Sons.
- Kramer, M. W. (1989). Communication during intraorganization job transfers. *Management Communication Quarterly*, 3, 219-248.
- Kramer, M. W. (2010). Organizational socialization joining and leaving organizations. Cambridge, UK: Polity.
- Kreitner, R., & Kinicki, A. (2010). Organizational Behavior. New York, NY: McGraw Hill/Irwin.
- 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, persongroup, and person-supervisor fit. *Personnel Psychology*, 58, 281-342.
- LaFasto, F. M. J., & Larson, C. E. (2001). When teams work best: 6,000 team members and leaders tell what it takes to succeed. Thousand Oaks, CA: Sage Publications.
- Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15, 127-147.
- Latham, G. P. (2004). The motivational benefits of goal-setting. Academy of Management Executive, 18, 126-129.
- Lawrence, T. B., & Robinson, S. L. (2007). Ain't misbehavin: Workplace deviance as organizational resistance. *Journal of Management*, 33(3), 378-394.
- Levine, T. R., Asada, K. J., & Carpenter, C. (2009). Sample sizes and effect sizes are negatively correlated in meta-analyses: Evidence and implications of a publication bias against nonsignificant findings. *Communication Monographs*, 76, 286-302.

- Locke, E. A. (2000). Motivation, cognition, and action: An analysis of studies of task goals and knowledge. *Applied Psychology: An International Review, 49*, 408-429.
- Locke, E. A. (2004). Linking goals to monetary incentives. *Academy of Management Executive*, 18, 130-133.
- Louis, M. R. (1980). Surprise and sense making: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly*, 25, 226-251.
- Louis, M. R., Posner, B. Z., & Powell, G. N. (1983). The availability and helpfulness of socialization practices. *Personnel Psychology*, *36*, 857-866.
- Major, D. A., Kozlowski, S. W. J., Chao, G. T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects of role development factors. *Journal of Applied Psychology*, 80, 418-431.
- McNatt, B. D. (2000). Ancient pygmalion joins contemporary management: A metaanalysis of the result. *Journal of Applied Psychology*, 85, 314-322.
- Mento, A. J., Steel, R. P., & Karren, R. J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966-1984. *Organizational Behavior and Human Decision Processes, 39, 52-83.*
- Mignerey, J. T., Rubin, R. B., & Gordon, W. I. (1995). Organizational entry: An investigation of newcomer communication behavior and uncertainty. *Communication Research*, 22, 54-85.
- Miller, D. C., & Form W. C. (1964). *Industrial sociology: The Sociology of work organizations* (2nd ed.). New York: Harper & Row.
- Miller, V. D., & Jablin, F. M. (1991). Information seeking during organizational entry: Influence, tactics, and a model of the process. *Academy of Management Review*, 16, 92-120.
- Miller, V. D., Poole, M. S., Seibold, D. R. with Meyers, K., Park, H. S., Monge, P. R., Fulk, J. Frank, L., Margolin, D., Schultz, C., Cuihua, S., Weber, M. Lee, S., & Shumate, S. (2011). Advancing research in organizational communication through quantitative methodology. *Management Communication Quarterly*, 25(1), 1-43.
- Monge, P. R. (1990). Theoretical and analytical issues in studying organizational processes. Organization Science, 1, 406-430.
- Moreland, R. L., & Levine, J. M. (1982). Group socialization: Temporal changes in individual-group relations. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 137-192). New York, NY: Academic Press.

Moreland, R. L., & Levine, J. M. (2001). Socialization in organizations and work groups.

In M. E. Turner (Ed.), *Groups at work: Theory and research* (pp. 69-112). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Moreland, R., L., & Levine, J. M. (2002). Socialization and trust in work-groups. Group Processes & Intergroup Relations, 5, 185-201.
- Morgeson, F. P., & Humphrey, S. E. (2008). Job and team design: Toward a more integrative conceptualization of work design. *Research in Personnel and Human Resources Management*, 27, 39-91.
- Morgeson, F. P., & Humphrey (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, 1321-1339.
- Mullen, B., & Cooper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115, 210-227.
- Natanovich, G., & Eden, D. (2008). Pygmalion effects among outreach supervisors and tutors: Extending sex generalizability. *Journal of Applied Psychology*, 93, 1382-1389.
- Ostroff, C., & Kozlowski, S. W. J. (1992). Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology*, 45, 849-874.
- Redding, W. C. (1972). Communication within the organization: An interpretive review of theory and research. New York, NY: Industrial Communication Council.
- Riddle, B. L., Anderson, C. M., & Martin, M. M. (2000). Small group socialization scale: Development and validity. *Small Group Research*, 31(5), 554-572.
- Roethlisberger, F. J., & Dickson, W. J. (1939). *Management and the worker*. Cambridge: Harvard University Press.
- Rosenthal, R. (1973). The mediation of pygmalion effects: A four-factor "theory." *Papua New Guinea Journal of Education*, 9, 1-12.
- Rosenthal, R. (1994). Interpersonal expectancy effects: A 30-year perspective. *Current Directions in Psychological Science*, *3*, 176-179.
- Rosenthal, R. (2002). Covert communication in classrooms, clinics, courtrooms, and cubicles. *American Psychologist*, 57, 839-849.
- Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom: Teacher expectation and pupils' intellectual development. New York: Holt, Rinehart and Winston.
- Rosenthal, R., & Rubin, D. R. (1978). Interpersonal expectancy effects: The first 345 studies. *The Behavioral and Brain Sciences*, *3*, 377-386.

Saks, A. M. (1995). Longitudinal field investigation of the moderating and mediating effects of

self-efficacy on the relationship between training and newcomer adjustment. *Journal of Applied Psychology*, 80, 211-225.

- Saks, A. M., & Ashforth, B. E. (1997). Socialization tactics and newcomer information acquisition. *International Journal of Selection and Assessment*, *5*, 48-61.
- 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, 413-446.
- Salancik, G. R., & Pfeffer, J. (1978). A social information procession approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- Schmitt, N. W., & Klimoski, R. J. (1991). Research methods in human resource management. Cincinnati, OH: South-Western Publishing Co.
- Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structurational model of identification in the organization. *Communication Theory*, 8(3), 298-336.
- Seashore, S. E. (1954). Group cohesiveness in the Industrial Work Group. University of Michigan Press, Ann Arbor, Michigan.
- Seibold, D. R., & Shea, B. C. (2001). In Jablin, F. M. & Putnam, L. L. (eds.), The new handbook of organizational communication: Advances in theory, research, and methods (2nd ed.) (pp. 664–703). Newbury Park, CA: Sage.
- Shaw, K. N. (2004). Changing the goal-setting process at Microsoft. Academy of Management Executive, 18, 139-142.
- Sias, P. M. (2009). Organizing relationships: Traditional and emerging perspectives. Thousand Oaks, CA: Sage.
- Simpson, E. H. (1951). The interpretation of interaction in contingency tables. *Journal of the Royal Statistical Society. Series B (Methodological), 13, 238-241.*
- Smith, F. J. (1962). Problems and trends in the operational use of employee attitude measurements. Paper presented at the Annual Meeting of the American Psychological Association.
- Smith, F. J. (1976). Index of organizational reactions (IOR). JSAS Catalog of Selected Documents in Psychology, 6(1), 54. No. 1265.
- Staton-Spicer, A. Q., & Darling, A. L. (1986). Communication in the socialization of preservice teachers. *Communication Education*, *35*, 215-230.
- Stajkovic, A. D., Lee, D., & Nyberg, A. J. (2009). Collective efficacy, group potency, and group performance: Meta-analysis of their relationships, and test of a mediation model. *Journal* of Applied Psychology, 94, 814-828.

- Steers, R. M. (1973). Task-goal attributes, individual need strength, and supervisory performance. Unpublished Doctoral Dissertation. University of California at Irvine.
- Stohl, C. (1986). The role of memorable messages in the process of organizational socialization. *Communication Quarterly*, 34, 213-249.
- Taylor, J. C., & Bowers, D. G. (1972). Survey of organizations: A machine scored standardized questionnaire instrument. Institute for Social Research, University of Michigan, Ann Arbor, MI.
- Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. Research in Organizational Behavior, 1, 209-264.
- Williams, K. D. (2007). Ostracism. Annual Review of Psychology, 58, 425-452.
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How long can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40, 560-567.
- Ziller, R. C. (1965). Toward a theory of open and closed groups. *Psychological Bulletin*, 64, 164-182.
- Zurcher, A. L. (1983). Social roles conformity conflict and creativity. Beverly Hills, CA: Sage Publications, Inc.