THE STRUCTURAL EFFECTS OF TEAM DENSITY AND NORMATIVE STANDARDS ON NEWCOMER PERFORMANCE

By

Brian Manata

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ABSTRACT

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This dissertation investigates the impact of team density and team standards on newcomer performance. Data were collected from 204 newcomers, with results indicating that team density had a substantial negative effect on newcomer performance. Moreover, although a positive effect was predicted, analyses indicated that team standards had a trivial impact on newcomer performance. An interaction effect between team density and team standards was also predicted, but the hypothesis failed to receive any statistical support. This dissertation ends with a detailed discussion in which the contribution and implications of this research are addressed, and directions for future research are offered.

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INTRODUCTION

Upon becoming organizational members, newcomers go through a period of socialization in which they are assimilated to the organization's normative culture (Kramer, 2010; Van Maanen & Schein, 1979). Specifically, during the socialization phase, newcomers "acquire the knowledge, skills, attitudes, and behaviors" (Wanberg, 2012, p. 12) deemed essential to fulfilling their organizational roles. In the main, this period of adjustment is conceptualized as a concerted effort between both newcomers and organizational incumbents (Bauer & Erdogan, 2014). Organizational initiatives, in particular, may be used to guide newcomers through structured or unstructured experiences that facilitate their adoption of relevant organizational beliefs, values, and norms (Jones, 1986; Van Mannen & Schein, 1979). Conversely, newcomers may actively seek out or observe information integral to fulfilling their organizational expectations and outcomes (Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994; Miller & Jablin, 1991; Morrison, 1993). In both respects, the assimilation phase is a period of time in which newcomers acquire normative information that guides them through their adjustment period (Kramer & Miller, 2014; Stohl, 1986).

Thus far, reviews of the socialization corpus generally recommend establishing and implementing socialization practices that facilitate newcomer learning and adjustment (e.g., Bauer &

Erdogan, 2014; Chao, 2012; Kramer & Miller, 2014). As van Vianen and Pater (2012) note, "a common understanding of organizational values and goals…advance[s] effective communication, smooth collaborations, and stability among organizational members" (p. 145). These conclusions are buttressed by two recent meta-analyses, which show that facilitating newcomer adjustment increases newcomer performance, role-clarity, and overall retention (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007; Kramer, 2010; Saks, Uggerslev, & Fassina, 2007).

Despite these empirical advances, socialization scholars have been criticized for failing to apply the tenets of *multilevel theory* (MLT; Kozlowski, 2012; Kozlowski & Klein, 2000) and the *social network approach* (SNA; Butts, 2009; Monge & Contractor, 2003; Newman, 2010). In the main, both perspectives suggest that failing to account for multilevel effects (i.e., group-level phenomena) as they occur within organizational systems obfuscates our understanding of how team-member relations facilitate newcomer performance and assimilation outcomes (Bauer & Erdogan, 2014; Jokisaari & Nurmi, 2012; Kozlowski & Bell, 2012; Manata, Miller, DeAngelis, & Paik, 2013). In an attempt to allay these criticisms, this study focuses on assessing the impact of variables deemed applicable to both multilevel theory and social network analysis (team density and standards). A literature review is provided below.

LITERATURE REVIEW

Multilevel theory (MLT) postulates that organizations are complex, hierarchical systems comprised of interdependent teams and larger units (Kozlowski & Klein, 2000; Morgan, 2006). Hence, assuming extant between-unit variation in team culture and normative standards, it is implied that newcomer socialization differs as a function of the specific unit to which the newcomer is socialized (Kozlowski & Bell, 2012; Moreland & Levine, 1982, 2001). Similar to MLT, the SNA postulates that individuals are embedded within multilevel, relational structures (Baurer & Erdogan, 2014; Jokisaari & Nurmi, 2012; Monge & Contractor, 2003; Newman, 2010). Network level effects, for instance, may be modeled at the team level of analysis (e.g., Balkundi & Harrison, 2006), organizational level of analysis (e.g., Contractor, Wasserman, & Faust, 2006), and so on. Both theoretical perspectives thus suggest that newcomer assimilation outcomes are likely to vary as a function of one's *position* and *pattern of relationships* (cf. Borgatti, Mehra, Brass, & Labianca, 2009; Crawford & Lepine, 2013).

Strikingly, research guided by these two theoretical perspectives (i.e., MLT and SNA) differs substantially from past socialization investigations. Specifically, whereas past approaches have focused primarily on the importance of acquiring organizational-level information (e.g., Chao et al., 1994;

Jones, 1986; Miller & Jablin, 1994; Stohl, 1986; Van Maanen & Schein, 1979), both MLT and SNA focus on the importance of investigating group-level peer interactions and newcomers' specific patterns of network relationships. Given the purported influence of newcomers' immediate peers during socialization (cf. Jablin, 2001; Moreland & Levine, 1982, 2001; Louis, Posner, & Powell, 1983; Ostroff & Kozlowski, 1992; Salancik & Pfeffer, 1978), the general omission of these perspectives is somewhat unanticipated. Correspondingly, the incorporation of variables that help illume the complex, multilevel nature of newcomer socialization is essential to uncovering new and highly important aspects of newcomer socialization (Bauer & Erdogan, 2014; Jokisaari & Nurmi, 2012; Kozlowski & Bell, 2012; Manata et al., 2013; Moreland & Levine, 2001).

Newcomer socialization studies guided by both theoretical perspectives (i.e., MLT and SNA) have helped illustrate how newcomers' network positions and group-level relations affect integral assimilation outcomes. Recent work by Chen (2005) and Chen and Klimoski (2003), for instance, shows that being socialized to high performing teams with strong expectations is associated with substantial increases in performance. Additionally, in her pioneering work on newcomer social capital, Morrison (2002) found that being positioned within dense *information networks* was associated with increases in newcomer

role clarity and task mastery; additionally, newcomers with strong *friendship ties* evidenced increases in role clarity, social integration, and organizational commitment. Jokisaari and Vuori (2014) relatedly found that newcomers' innovativeness increased as their informational resources became increasingly heterogeneous, and Jokisaari (2013) found that stronger ties to work colleagues transformed newcomers into more effective group members. Overall, these studies reinforce the practical and theoretical importance of assessing how group-level phenomena and network properties impact key assimilation outcomes like performance.

Team Density

Of the myriad team-level network variables available (see Hanneman & Riddle, 2005; Monge & Contractor, 2003; Newman, 2010), *density* is highly applicable to the multilevel nature of teams, members' relational patterns, and socialization outcomes (e.g., performance; Balkundi & Harrison, 2006). Density is defined as the extent to which nodes found within a network are interconnected (Hanneman & Riddle, 2005; Monge & Contractor, 2003). Accordingly, denser networks come to fruition as the connectivity between nodes increases (Newman, 2010). When extrapolated to the team level of analysis, the *density of the team* increases as connections between team members are realized (Balkundi & Harrison, 2006).

Denser groups are typically characterized by increases in information exchange, collaboration, and overall member interaction (Coleman, 1988; Sparrowe, Liden, Wayne, & Kraimer, 2001; Zohar & Tenne-Gazit, 2008). Notably, in other literatures, these patterns of interaction have been shown to lead to increases in both team and member performance. For instance, in their recent meta-analysis of the hidden profile literature, Lu, Yuan, and McLeod (2012) showed that information sharing in groups was associated with substantial increases in decision-making accuracy. Moreover, recent reviews by Kozlowski and Ilgen (2006) and Kozlowski and Bell (2012) conclude that establishing shared mental schema of work-related activities aids with task completion and member coordination. Relatedly, in their meta-analysis, Balkundi and Harrison (2006) found a positive association between team density and team performance, and subsequent empirical investigations have since then buttressed their initial conclusions (e.g., Bizzi, 2013; Mehra, Dixon, Brass, & Robertson, 2006; Roberson & Williamson, 2012; Zohar & Tenne-Gazit, 2008). Given the overall positive effects of team-level density, the first hypothesis is offered.

H1: Team density positively predicts newcomer performance.

Normative Standards

An additional mechanism by which team density influences member behavior is normative constraint and coordinated action

(Burt, 2000; 2001; Coleman, 1988). Within group contexts, norms are defined as established patterns of group member behavior to which other members of the group commonly adhere (Burgoon, 1978; Lapsinki & Rimal, 2005). Thus, as members enter networks that are highly clustered and dense, they are likely to be exposed to group-level normative standards that ultimately constrain their behavior (Centola, 2010; Shakya, Christakis, & Fowler, 2014). Barker (1993) and Gibson and Papa (2000), for instance, found that as newcomers entered their respective organizational units, they experienced pressure from organizational incumbents to adopt the team's normative standards. This is in line with the theoretical musings of Jones (1984), who posited that as members' actions become increasingly visible to other unit members, normative pressures would likely ensue and thus attenuate member "shirking or freeriding" (p. 686). Such norms are likely injunctive in nature, where violations of said normative behaviors are met with both social sanctions and member disapproval (Glynn & Huge, 2007; Jackson, 1966, 1975; Lapinski & Rimal, 2005; Manata & Miller, 2012; Miller & Form, 1964).

In the absence of social sanctions, the mere espousal of normative standards likely conveys descriptive attitudinal information to which members assimilate (cf. de la Haye, Mohr, Robins, & Wilson, 2013; Lapinski & Rimal, 2005; Zohar & Hoffman,

2012). In his seminal work, Friedkin (1984) found that members' attitudes were homogeneous with those of their direct social circle contacts. Within organizational settings, Fulk (1993) similarly found that workgroup attitudes and behaviors predicted those of individual members, as long as the members were attracted to the workgroup. Other organizational studies and reviews have also shown how organizational members' attitudes and behaviors are typically predicted by the attitudes of those in their vicinity—generally, their work group (e.g., see Jokisaari & Nurmi, 2012; Rentsch, 1990; Stephens & Davis, 2009). Overall, these findings imply that performance norms and attitudes conveyed by newcomers' peer groups are likely related to how newcomers ultimately perceive the importance of their task (cf. Zohar & Hoffman, 2012), and thus how they perform (cf. Kim & Hunter, 1993). In consequence:

H2: Team standards positively predict newcomer performance.

Team Density and Normative Standards

Intriguingly, the argument thus far suggests that high-density teams have the ability to constrain and socialize newcomers to either high *or* low levels of performance (i.e., a *team density* x *normative standards* interaction). Presumably, units with high levels of team density are able to generate normative environments that constrain members' actions (Burt, 2001; Coleman, 1988; Zohar & Tenne-Gazit, 2008). Thus, for teams

that are high in density *and* socialize newcomers to high performance norms, newcomer performance should increase (e.g., Chen, 2005; Chen & Klimoski, 2003; Katzenbach & Smith, 1993). Inversely, for teams that are high in density but evidence low performance standards, organizational teams and units may suppress the productivity of their members by either actively constraining their output (e.g., Cohen & Bailey, 1997; Roethlisberger & Dickson, 1939; Taylor, 1914; Zurcher, 1983) or by espousing and *infecting* newcomers with low-level performance standards (Monge & Contractor, 2003; Schein, 1968; cf. Zohar & Hoffman, 2012). In either case, the effect of normative constraint on newcomer performance likely depends on the *strength* and specific *direction* of the normative standard.

In support of these assertions, Langfred (1998) found that workgroup standards moderated the cohesion-performance relationship, such that group cohesion enhanced team performance when normative standards were high, but attenuated it when they were low. Similarly, when studying the effects of latrine ownership, Shakya et al. (2014) found that latrine ownership was lowest when participants' network interconnectedness (defined as transitivity) was high and others' latrine ownership was low; notably, this effect disappeared as others' latrine ownership decreased, thus suggesting that participants were less likely to

be subjected to normative peer pressures. Thus, in line with these empirical findings, it is predicted that:

> **H3:** Newcomer performance will be highest when team density and team standards are high, but lowest when team density is high and team standards are low. Moreover, when team density is low, the effect of team standards will be weaker when compared to these two conditions.

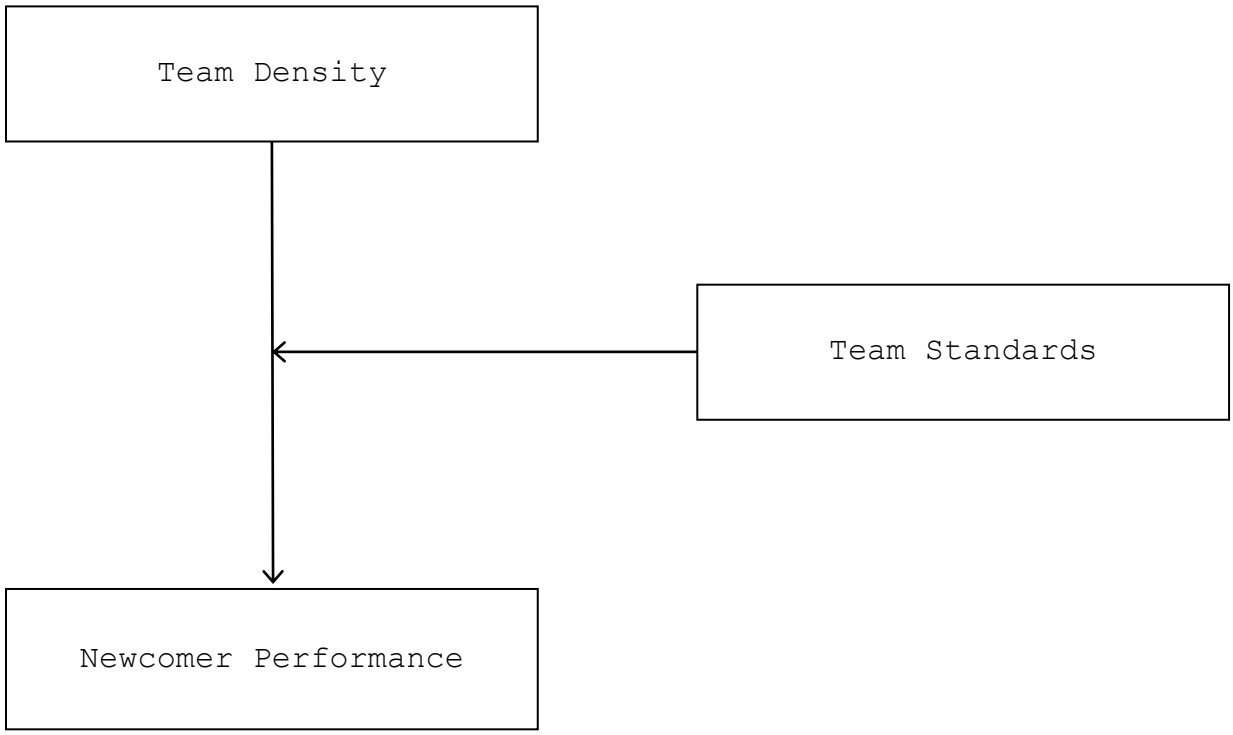


Figure 1. **Hypothesized interaction model between team density and team standards (H3).**

METHOD

Participants were sampled from the Residence Education and Housing Services (REHS). REHS is a unique community of Resident Assistants (RA) who are charged with overseeing the living conditions and acclimation of undergraduate students. Moreover, RAs work in small teams, which are led by Assistant Community Directors (ACDs; graduate student advisors), that meet on a weekly basis in order to deal with work issues as they arise throughout the week. Because RAs typically live and work within close proximity to one another, and because hundreds of new RAs are socialized to the REHS community each year, the RA population was deemed a good sample by which to assess the effects of team density and team standards on newcomer performance.

Procedure

Data from this sample were collected during an REHS meeting that all RAs and ACDs were required to attend (before the start of the Spring 2015 semester). During this meeting, RAs and their corresponding ACDs were asked to split up into their respective sub-staffs, and then each sub-staff was given a set of customized survey packets. These survey packets contained a complete list of members assigned to each sub-staff. Thus, this procedure allowed participants to report on how often they sought work-related advice from members assigned to their

specific team. Each survey packet also contained general measures of *team standards*, *newcomer performance*, demographic information (gender, months worked, etc.), and other relevant control variables (see Appendix for full instrument).

Sample

In total, 340 RAs and ACDs across 45 different sub-staffs from REHS were sampled. Eighteen participants, however, had to be dropped from the subsequent analyses. Specifically, eight of these participants were *brand new* and thus had very limited or no experience. Additionally, 10 participants were *transfers* and thus did not have their names listed on the sub-staff's customized survey packet. A decision was made to drop both types of individuals (i.e., brand new and transfers) because sub-staff members were unable to report on whether they sought task-related advice from these members. Additionally, for participants that were *brand new*, no connections were typically listed because they had yet to be integrated into the REHS network (i.e., they had no connections to report). These 18 participants were removed from the sample, as keeping them would have forced the introduction of numerous, potentially artificial, zeroes (i.e., false non-connections) into the density calculation, thus underestimating it.

Of the remaining 322 REHS members, n = 204 were classified as newcomers by REHS because they had been employed for 12

months or less. This sub-sample of *n* = 204 thus constituted the final sample of newcomers used in the subsequent analysis. Moreover, given the abundance of newcomers, teams were primarily composed of incoming RAs (*M* = 63%; *SD* = .15%)

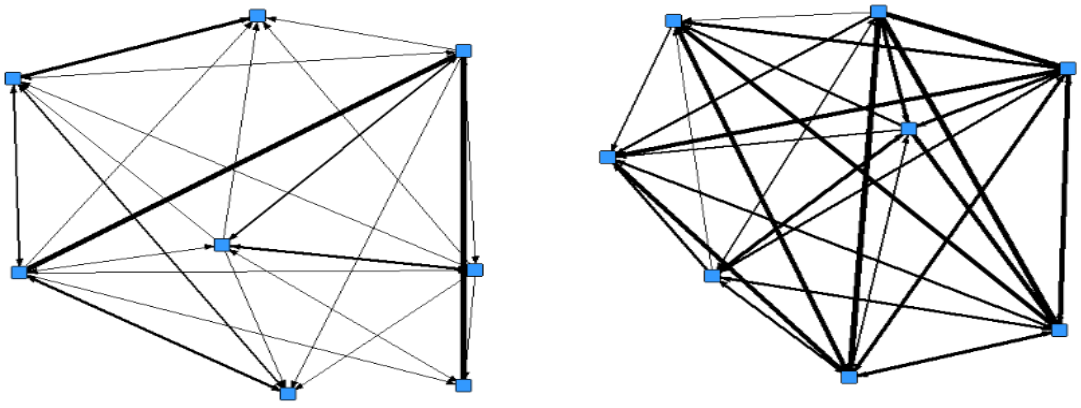
Of these available data, 88.7% (*n* = 180) of the participants were RAs, 10.8% (*n* = 22) were Assistant Community Directors, and 0.5% (*n* = 1) were Community Directors (supervisorial position). Subjects were mostly female (54.4%; *n* = 111), and identified as Caucasian (65.3%; *n* = 132), Black/African American (13.9%; *n* = 28), Asian (8.4%; *n* = 17), Multi-ethnic (5.4%; *n* = 11), and a range of other ethnicities (7%; *n* = 14). Additionally, participants were on average 20.67 years old (*SD* = 2.10), had been working for roughly 5.21 months (*SD* = 2.62), and identified as sophomores (34.3%; *n* = 70), juniors (37.3%; *n* = 76), seniors (15.2%, *n* = 31), and graduate students (13.2%, *n* = 27).

Measures

Team Density. To calculate team density, each team member was sent a list of their respective team members' names and asked to check off the names of those from whom they sought work-related advice (e.g., Bizzi, 2013). Participants were also asked to report on how frequently these advice-seeking interactions occurred. Frequency of advice-seeking interactions was measured using a one-item measure that ranged from 1 = *less*

than once a week to 7 = *several times a day*. This addition helped differentiate between stronger and weaker advice-seeking ties, and also allowed for the network to be treated as a directed network (i.e., Member A may be tied to Member B, but Member B need not be tied to Member A).

Team-level density ratios were calculated by dividing the sum of tie values by the total number of possible ties (Hanneman & Riddle, 2005). To produce team-level density ratios, the data matrix was partitioned into hypothesized blocks that represented each of the sub-staffs and their respective members. Following this, the density formula was applied to each of the partitioned blocks (UCINET, Borgatti, Everett, & Freeman, 2002; Hanneman & Riddle, 2005). Density scores ranged from 0 to 7, with higher scores representing stronger degrees of task-related advice-seeking activity (M = 1.83; SD = .52) (see Figure 2).



LOW DENSITY GROUP **HIGH DENSITY GROUP**

Figure 2. **Low versus high density group.** Thicker ties equate to stronger connections.

Team Standards. The extent to which RA teams had high standards of performance was measured using Taylor and Bower's (1972) three-item peer goal emphasis scale. These items were positioned on 5-point Likert-type scales (1 = strongly disagree; 5 = strongly agree).

Because *team standards* were theorized to be a group-level factor, within-group agreement in team standard scores was assessed using the intra-class correlation (Bliese, 2000). This analysis showed that subjects' team standards responses evidenced substantial within-group agreement (ICC = .20, $p < .001$; cf. Kashy and Kenny, 2000; Maas & Cox, 2004a), thus providing validity to the claim that team standards construct was operating at the group-level of analysis (Kozlowski & Klein, 2000). As such, individual-level perceptions of team-level standards were aggregated to the team-level of analysis (M = 5.84; SD = .55).

Newcomer Performance. Although ACDs are required to formally evaluate the performance of their respective RAs twice a year, a complete set of formal evaluations were not available at the time of data collection. In an attempt to assuage this limitation, newcomer performance scores were derived by soliciting subjective self-report evaluations using a one-item measure that ranged from 0%-100% (M = 84.28; SD = 7.59).

Control Variables. ***Task and Social Cohesion.*** A decision was made to control for the potentially confounding effects of group cohesion. Specifically, given the similarity of Langfred's (1998) *Group Cohesion* x *Team Standards* hypothesis (i.e., network density has been previously conceptualized as a measure of structural cohesion; Hanneman & Riddle, 2005), it was deemed important to control for group cohesion in order to conclude that any of the team density effects were unique from the findings of Langfred (1998). To account for this, both task and social cohesion measures were created by adapting items from Carron et al.'s (1985) GEQ cohesion instrument and adding custom-made items. *Task cohesion* is defined as an attraction and unification toward the task, whereas *social cohesion* is defined as a general attraction to the group and its members (Castano et al., 2013; Dion, 2000).

Similar to team standards, intra-class correlations were calculated in order to assess the degree of within-group agreement in both task and social cohesion scores. Analyses show that subjects' task cohesion responses evidenced substantial within-group agreement (ICC = .27, $p < .001$; $M = 5.91$; $SD = .55$). Additionally, subjects' social cohesion responses also evidenced within-group agreement, albeit not as substantially, and was thus also treated as a group-level factor (ICC = .12, $p = .002$; $M = 6.34$; $SD = .51$) (Bliese, 2000; see Kashy & Kenny,

2000 for recommendations on acceptable levels of ICCs). Thus, both factors were aggregated to the group-level of analysis.

Leader Member Exchange (LMX). Given the integral role of the supervisor (ACD), the positive effects of LMX on job performance (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012) were controlled for statistically. High LMX relationships are typically classified as evidencing substantial trust, respect, and liking between both supervisor and subordinate. Conversely, low LMX relationships lack in these ostensibly important relational characteristics (Liden & Maslyn, 1998). To measure LMX, items were adapted from Graen & Uhl-Bien's (1995) recommended LMX scale (items were positioned on 4-point scales). Because the purpose of this variable was to control for individual-level perceptions of leader-member relations, this factor was kept at the individual-level of analysis (M = 3.36; SD = .59).

Reception of Performance Evaluation. As mentioned above, ACDs are tasked with formally evaluating their respective RAs' performance twice a year (once in December, and once in May). Despite this, the exact time at which RAs receive their performance evaluations from their ACDs is not held constant across sub-staffs. Thus, it may be the case that in some sub-staffs RAs received their performance evaluations in December (i.e., pre data collection), whereas in other sub-staffs, RAs

had yet to receive their performance evaluations before participating in this study (i.e., post data collection). Given that these data were collected during the first week of January, and given that all formal evaluations had yet to be completed, this created a condition in which some RAs had received their performance evaluations (n = 125, 63.78%), and others had not.

Depending on the nature of the evaluation (i.e., negative, neutral, positive), it is not unreasonable to expect the existence or absence of such an evaluation to impact the number of connections reported by the subjects, or their reported levels of self-rated performance. A negative evaluation, for instance, may either attenuate perceptions of performance ability, or alter RAs' advice-seeking patterns. Thus, in order to control for this potentially confounding factor, a one-item measure asking subjects if their performance evaluations had already been received was included in the survey.

Measurement Model

The structural validity of the proposed four-factor model (i.e., team standards, task cohesion, social cohesion, LMX) was assessed using confirmatory factor analysis (cf. Hunter, 1980; Hunter & Gerbing, 1982). Factor loadings were derived using the centroid method of estimation, and internal consistency and parallelism theorems were used to generate predicted correlations for each of the indicators. Items evidencing

consistently large residuals were deemed invalid and removed from the analysis.

Upon removal of items with exceedingly large residuals, inspection of the root mean squared error term suggested good model fit (RMSE = .05). Moreover, alpha levels across each of the four factors suggested good to adequate levels of reliability. The four-factor model was thus retained. For a full list of items, factor loadings, means, standard deviations, and reliability coefficients attributable to each of the four factors, see Table 1, below.

Table 1.
Factor Loadings, Reliabilities, Means, and SDs across each of the Four Factors

	TS	TC	SC	LMX
Team Standards (α = .89) (M = 5.84, SD = .55)				
Members on my sub-staff maintain high standards of performance.	.89			
Members on my sub-staff set an example by working hard themselves.	.89			
Members on my sub-staff encourage each other to give their best efforts.	.78			
Task Cohesion (α = .88) (M = 5.91, SD = .55)				
When members of my sub-staff work together, it feels like an integrated experience.		.70		
Members on my sub-staff are unified when working together.		.87		
Members on my sub-staff work well with each other.		.84		
Members on my sub-staff get along with each other when working together.		.83		
Members on my sub-staff have conflicting aspirations		--		
Social Cohesion (α =.86) (M = 6.34, SD = .51)				
I do not enjoy being a part of my sub-staff.			.74	
I do not want to be friends with those on my sub-staff.			.78	
I would have rather preferred being in a sub-staff with other people.			.80	
Members in my sub-staff make me feel uncomfortable.			.80	
If given the chance to work with my sub-staff again, I would take it.			--	
LMX (α =.86) (M = 3.36, SD = .59)				
Do you usually know how satisfied your ACD is with what you do?				.65
How well do you feel that your ACD understands your problems and needs?				.85
How well do you feel that your ACD recognizes your potential?				.81
Regardless of how much formal authority your ACD has built into his or her position, what are the chances that he or she would be personally included to use power to help you solve problems in your work?				.60
Again, regardless of the amount of formal authority your ACD has, to what extent can you count on him or her to "bail you out" at his or her expense when you really need it?				--
I have enough confidence in my ACD that I would defend and justify his or her decision if he or she was not present to do so.				--
How would you characterize your working relationship with your ACD?				.84

RESULTS

Control Variables

Before conducting any of the main analyses, the effects of the control variables (task cohesion, social cohesion, LMX, reception of performance evaluation) on newcomer performance were assessed using a hierarchical linear model (HLM; Raudenbush & Bryk, 2002; Singer, 1998; Singer & Willet, 2003). Substantial group-level effects emerged for task and social cohesion. Increases in task cohesion predicted increases in newcomer performance scores, $\gamma = 3.22$, $z = 1.99$, 95% CI [0.05, 6.39]. Moreover, and quite interestingly, increases in social cohesion predicted substantial decreases in newcomer performance scores, $\gamma = -3.57$, $z = -2.21$, 95% CI [-6.75, -0.40]. Both of these variables were thus controlled for statistically when performing subsequent analyses.

Conversely, *LMX* and *reception of performance evaluation* evidenced trivial effects on newcomer performance, and were thus dropped from subsequent analyses (Singer & Willet, 2003).

Reception of Performance Evaluation

Whether or not the previous reception of a formal evaluation altered the amount of reported connections was also of concern. To assess whether this factor impacted the number of reported work-related advice-seeking connections, a measure of out-degree centrality (i.e., reported outward connections;

Newman, 2010) was computed for each of the subjects. Analyses indicated that there was not a substantial difference in the number of reported outward connections when comparing those that had received their performance evaluations (M = 10.96, SD = 7.33) to those that had not yet received it (M = 11.60, SD = 7.92), $t(308) = .72$, $p = .48$. As such, and in conjunction with the initial regression model stipulated above, this variable was no longer considered during analysis.

Hypothesis Testing

In ascertaining the main effects of team density (H1) and team standards (H2), both variables were added to the previously stipulated HLM model. Formally,

$$\text{Newcomer\_Performance}_{ij} = \pi_{0j} + \varepsilon_{ij}$$

and

$$\pi_{0j} = \gamma_{00} + \gamma_{01}\text{Task Cohesion}_j + \gamma_{02}\text{Social Cohesion}_j + \gamma_{03}\text{Team Density}_j + \gamma_{04}\text{Team Standards}_j + \zeta_{0j}$$

thus leaving us with the combined model of

$$\text{Newcomer\_Performance}_{ij} = \gamma_{00} + \gamma_{01}\text{Task Cohesion}_j + \gamma_{02}\text{Social Cohesion}_j + \gamma_{03}\text{Team Density}_j + \gamma_{04}\text{Team Standards}_j + \left(\varepsilon_{ij} + \zeta_{0j}\right)$$

where

ε_{ij} = within-group residual

ζ_{0j} = between-group residual

γ_{00} = grand mean

π_{0j} = group-level mean

γ_{01} = group-level effect of task cohesion

γ_{02} = group-level effect of social cohesion

γ_{03} = group-level effect of team density

γ_{04} = group-level effect of team standards

Upon running this model, inspection of the residuals for the stochastic component of the model evidenced substantial departure from normality. Departures from normality are known to result in biased second-level standard errors (Maas & Cox, 2004a; 2004b), which affect the accuracy of the confidence intervals used to assess the fixed effects at Level-2 (Raudenbush & Bryk, 2002). Robust standard errors were thus used to assess the validity of Hypotheses 1-3, as they are less affected by this violation (Maas & Cox, 2004a; 2004b).

Hypothesis 1. Counter to expectations, team density emerged as a substantial negative predictor of newcomer performance (γ = -1.67, z = -1.85, 95% CI [-3.46, 0.10]). Explicitly, increases in team density were associated with decreases in newcomer performance. Thus, despite the emergence of a substantial effect, the proposed positive effects of team density (H1) failed to receive statistical support.

Hypothesis 2. In terms of team standards, although the effect appears somewhat negative (γ = -1.34, z = -0.98, 95% CI

[-4.02, 1.34]), the confidence interval is quite wide, thus indicating that the effect is decidedly weak and potentially due to sampling error. Thus, team standards did not have a substantial direct effect on newcomer performance. As such, H2 also failed to receive statistical support.

Hypothesis 3. To assess the validity of H3, an interaction term, which was designated as the multiplicative term between team density and team standards, was added to the previously stipulated model. Formally,

$$\text{Newcomer\_Performance}_{ij} = \gamma_{00} + \gamma_{01}\text{Task Cohesion}_j + \gamma_{02}\text{Social Cohesion}_j + \gamma_{03}\text{Team Density}_j + \gamma_{04}\text{Team Standards}_j + \gamma_{05}\text{Team Density}_j \times \text{Team Standards}_j + \left(\varepsilon_{ij} + \zeta_{0i}\right)$$

where

$\gamma_{05}\text{Team Density}_j \times \text{Team Standards}_j$ = the group-level interaction effect between team density and team standards

This model produced an interaction estimate in the predicted direction (γ = 1.24, z = 0.95, 95% CI [-1.33, 3.81]), but, given the small group-level *N*, also included 0 in its confidence interval. To visualize this effect, the regression equation was modeled at +1, 0, and -1 *SD* of team standard's mean. As is shown in Figure 3, newcomer performance appears lowest when team density is high and team standards are low. Conversely, when team density is high and team standards are

high, the negative effects of team density are mitigated. Thus, a visualization of the interaction provides some support for the tenets that underlie H3.

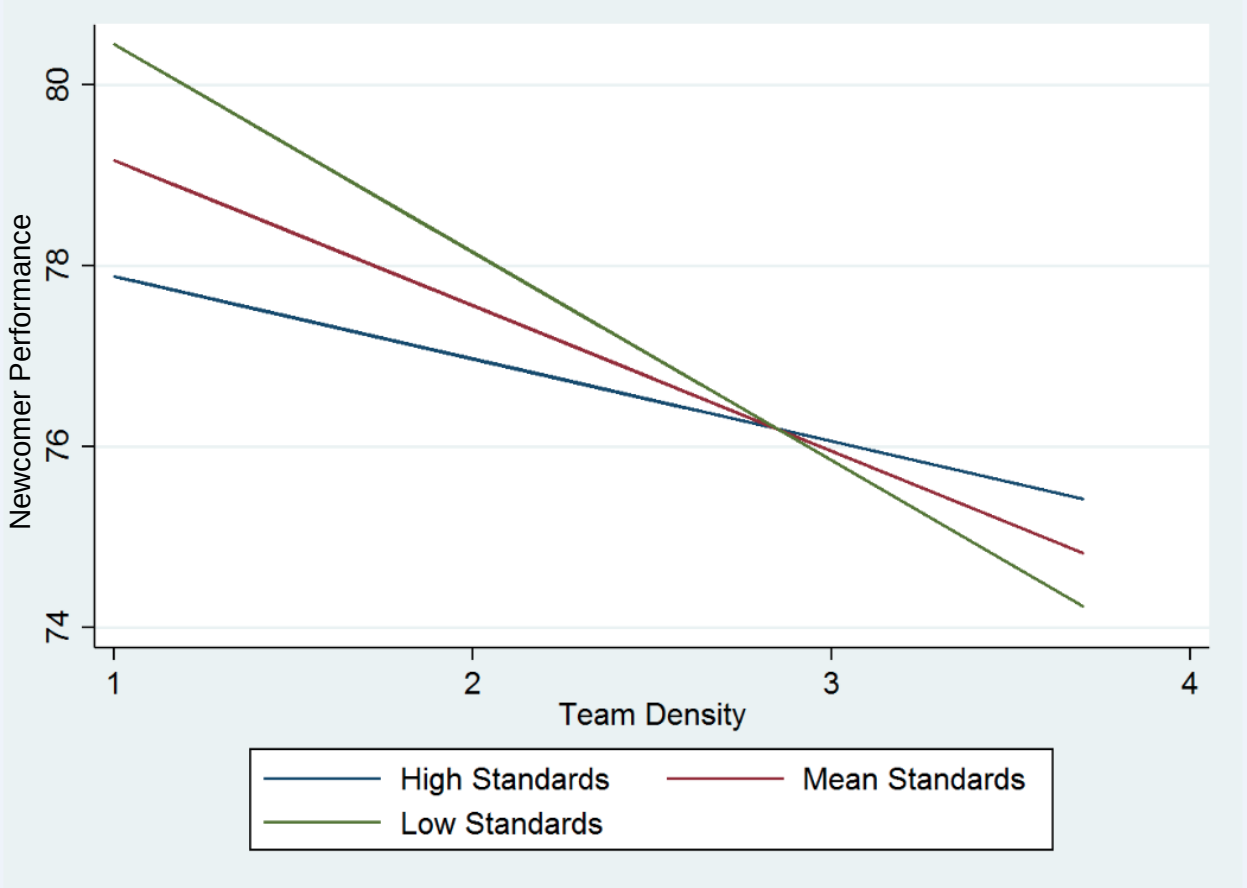


Figure 3. **Visualized interaction term; outliers included.**

Post-Hoc Outlier Analysis

The above regression model flagged three participants as substantial statistical outliers (i.e., standards residuals were more than three standard deviations away from the newcomer performance regression line). Inspection of these individuals indicated that they evaluated their own performance as exceptionally low (i.e., 50%, 50%, and 65%, respectively). In an

attempt to assess whether these outliers altered the previously reported conclusions, these individuals were excluded and the regression models were re-run.

The negative effect of team density (H1) remained negative and became substantial, γ = -2.67, z = -3.86, 95% CI [-4.03, -1.31]. Moreover, the insignificant effects of team standards (H2) became substantially weaker, γ = -.11, z = -0.09, 95% CI [-2.55, 2.33], thus corroborating the notion that team standards had little to no direct effect on newcomer performance.

Lastly, and perhaps most importantly, removal of the outliers negated the interaction effect reported above, γ = -.24, z = -0.24, 95% CI [-2.24, 1.75]. This occurred because the three outliers reported high levels of team standards *and* low levels of team density, thus making the high standards regression line appear comparatively less steep than the low standards regression line (i.e., artificial non-additivity). As such, upon removal of the outliers, H3 also failed to receive any statistical support.

The coefficients attributable to each of the three multilevel regression models are found in Tables 2 (outliers included) and 3 (outliers removed). Moreover, correlation coefficients for each of the factors are reported in Table 4.

Table 2.
Predictors of Newcomer Performance Scores (outliers included)

	Model 1 B	Model 2 B	Model 3 B
Constant	82.19***	88.39***	101.28***
Task cohesion	3.22*	4.57**	4.44**
Social cohesion	-3.57*	-3.18*	-3.11*
LMX	0.84	--	--
Evaluation receipt	1.86	--	--
Team density		-1.67†	-8.81
Team standards		-1.34	-3.53
TS x TD (H3)			1.24

Note. Coefficients are unstandardized coefficients.
†$p < .10$ *$p < .05$. **$p < .01$. ***$p < .001$

Table 3.
Predictors of Newcomer Performance Scores (outliers excluded)

	Model 1 B	Model 2 B	Model 3 B
Constant	80.24***	84.68***	82.15***
Task cohesion	3.39*	3.99**	4.01**
Social cohesion	-3.17*	-2.81†	-2.82†
LMX	0.63	--	--
Evaluation receipt	1.60	--	--
Team density		-2.67***	-1.28
Team standards		-0.11	-0.32
TS x TD (H3)			-0.24

Note. Coefficients are unstandardized coefficients.
†$p < .10$ *$p < .05$. **$p < .01$. ***$p < .001$

Table 4.
Correlations between Factors

	NP	TD	TS	TC	SC	LMX	EVAL
Newcomer performance							
Team density	-.11						
Team standards	.13	.26					
Task cohesion	.18	.21	.72				
Social cohesion	.01	.14	.48	.70			
LMX	.06	-.02	.11	.18	.29		
Evaluation received	.16	-.16	.07	.26	.23	.14	

Note. Group N = 45, *Newcomer Listwise n* = 178. Column labels are abbreviations of the corresponding row labels; $p < .05$. if $r > .15$; outliers excluded.

DISCUSSION

Analyses suggest that team density had a negative effect on newcomer performance, whereas team standards had a negligible effect on newcomer performance. Moreover, these effects remained consistent despite excluding the three outliers.

The exclusion of the three outliers, however, did impact the substantive conclusions regarding H3. The predicted interaction effect received partial support when the outliers were included in the analyses, but failed to receive any statistical support when they were excluded. This means one of two things: (1) the newcomers flagged as outliers were true outliers and thus produced artificial non-additivity, or (2) a larger sample with additional low-performing newcomers would negate the outlier status of the three outliers and thus clarify the nature of the proposed interaction effect (H3). In either case, it is evident that additional research is required.

Despite failing to find statistical support for all three hypotheses, the results and nature of this study shed light on newcomer socialization experiences. Specifically, the previously unexplored concepts of team density (structural cohesion) and standards were integrated into the socialization corpus, which differs markedly from past studies in which scholars have instead focused on assessing the impact of organizational context (Van Maanen & Schein, 1979), informational content (Chao

et al., 1994), and memorable messages (Stohl, 1986). The main difference lies in the locus of analysis, which has traditionally been focused at the individual-level. Thus, whereas past studies have focused on the impact of individual-level predictors, this study instead examined how group-level phenomena (e.g., team standards) and structural variables (team density) impacted newcomer performance. As such, an overarching framework is provided in which the influence of peer-level interactions (Jablin, 2001) and multilevel organizational structure (Monge & Contrator, 2003) are now assessable within the context of newcomer socialization (Bauer & Erdogan, 2014).

This study is also unique from previous newcomer socialization works in which the impact of myriad structural variables were investigated. Past work has examined the impact of ego-network densities (Jokisaari, 2013; Jokisaari & Vuori, 2014; Morrison, 2002), which is an individual-level property and thus different from team-level density, which is a group-level variable. Doing so forced the differentiation between personal and team-level networks, which are conceptually different and thus hold the potential to have different effects (Kozlowski & Klein, 2000). Future research may attempt to conduct newcomer socialization research in which both networks are accounted for, thus allowing for the comparison of both types of networks.

Team density was further distinguished from measures of psychological cohesion (task and social cohesion), which was important given that the different types of cohesion evidenced disparate effects. The effects of task cohesion on newcomer performance, for instance, were positive, but the effects of team density (structural cohesion) and social cohesion were negative. Using measures of structural and psychological cohesion interchangeably should thus be implemented with caution, as their effects appear non-parallel (Dion, 2000).

Team Density

The negative team density effect contradicts the findings found in Balkundi and Harrison's (2006) meta-analysis, which produced a positive effect between team density and team performance. One may attempt to account for this unexpected finding by considering the RA role, which one may argue is primarily independent. When roles are independent, team density may thus hamper, as oppose to foster, effective role performance. To wit, if RAs are forced to work in teams despite having independent roles, higher levels of density may mean that RAs are not spending enough time performing their duties. This information may be especially pertinent to RA administrators, as they, in this instance, have appeared to force the creation of teams that may be directly responsible for stifling the performance of their employees.

Future investigations of this ilk may make great use of RA teams, as they present a considerable advantage in that they are primarily composed of independent members (a rare occurrence; cf. Kozlowski & Bell, 2012). In conjunction with assessing the impact of team density on other similar groups (e.g., faculty departments), similar evidence in line with what was produced here may emerge, and thus begin to illume the presence of important moderators that account for variance in the team density → team performance relationship (cf. Hunter & Schmidt, 2004).

Considering the nature of the network tie (i.e., advice-seeking ties) may also help explain the negative team density effect. In particular, members that spend great amounts of time seeking advice from others may be doing so because they believe that they are not performing their jobs well. Given that performance was measured using a one-item self-evaluation measure, this explanation is also quite sensible.

Team Standards

This study revisited the role of team standards, a concept which has been long forgotten and essentially neglected in newcomer socialization research (see Roethlisberger & Dickson, 1939; Taylor, 1914). Despite predicting a strong positive effect on newcomer performance, the HLM revealed that team standards had a trivial effect on newcomer performance after controlling

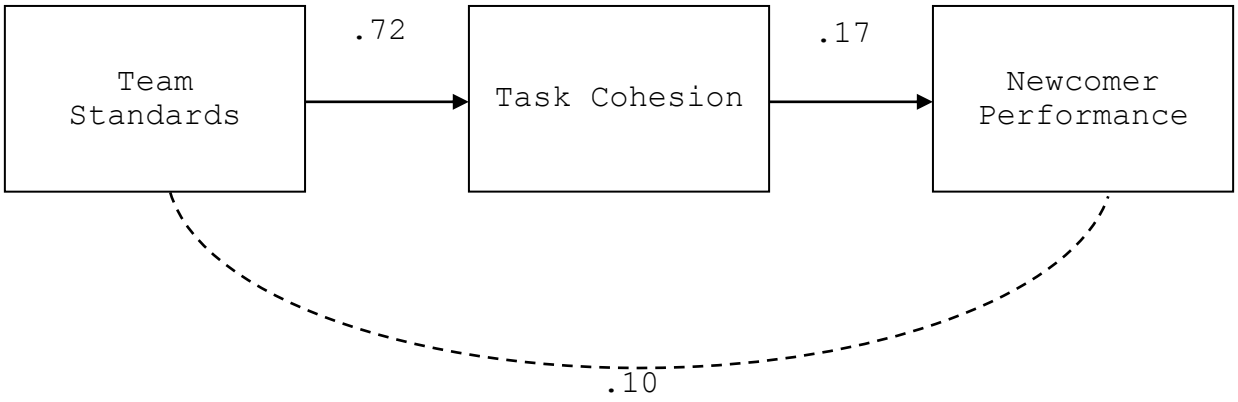


Figure 4. **Post-hoc hypothesis and finding, in which team standards has a small indirect effect on newcomer performance (*N* = 45); outliers excluded.**

for both task and social cohesion. This is not to say, however, that team standards do not play a critical role in the eventual performance of newcomers. Strong team standards, for instance, may be essential to establishing strong levels of task cohesion (Hoigaard, Safvenbom, & Tonnessen, 2006), which then impact newcomer performance (Castano et al., 2013). Inspection of the correlation matrix provides some support for this initial conjecture. Indeed, a simple causal model in which team standards predict task cohesion, which then predicts newcomer performance, fits the data quite well (see Figure 4).

Future research that attempts to evaluate the tenability of this post-hoc hypothesis may begin to shed light on the proposed effects of team standards. In doing so, RA administrators (as well as other organizational executives) may use this

information to generate team compositions in which a predominant proportion of members have high standards of performance (cf. Bell, 2007).

Researchers might also begin to address other aspects pertinent to the study of team standards and newcomer socialization. For example, future research may attempt to focus precisely on *from whom* the newcomer is gleaning normative information. In this study, newcomers were able to indicate that they sought advice from both peers and supervisors. It may be, however, that some newcomers place greater value on information received from peers (Ostroff & Kozlowski, 1993), whereas others place greater value on information received from supervisors (cf. Ostroff & Kozlowski, 1992). Under circumstances in which the standards of peers differ from supervisorial standards, divisive faultlines may divide the team in two, which may allow for divergent standards of performance to exist concurrently within a single team (Lau & Murnighan, 1998; Taylor, 1914). When these scenarios arise, exactly whom the newcomer retrieves information from, or precisely why one acclimates to one sub-group over another, remains an interesting question.

Differentiating between different measures of density-like constructs (e.g., constraint, Hanneman & Riddle, 2005), as well as slightly different conceptualizations of the network density idea (e.g., ego-network density), may also help shed additional

light on the negligible team standards effect. For instance, and as noted above, ego-network density does not focus on the team, but rather focuses on the member's personal network (e.g., Jokisaari & Vuori, 2014; Morrison, 2002). Thus, researchers must contend not only with the standards of a newcomer's specific team (team-level variable), but also with the standards of the newcomer's own personal network (individual-level variable). This distinction is an interesting one to make, as it suggests that some newcomers may retrieve normative information from members on their team, whereas others may retrieve normative information from members deemed external to their team (or both). Ultimately, it may be that normative information culled from a members preferred network acts as the main predictor of their eventual behavior.

Finally, exactly how normative standards are conveyed to newcomers remains unclear, and will likely illume the processes by which both team standards and team density operate. Normative constraint to performance standards, for instance, can occur because (a) members explicitly communicate normative information to the newcomer (injunctive influence) (Hackman, 1992), or because (b) newcomers simply observe the normative behaviors of others over time (descriptive influence) (Miller & Jablin, 1991). The effects of standards may thus operate via injunctive or descriptive influence (or both), which raises the possibility

of different effects (cf. Lapinski & Rimal, 2005). Understanding which of these normative influences impacts newcomer behavior will be integral to understanding how both team standards and team density operate during newcomer socialization.

Limitations

The ranges in scores of the three main variables (i.e., team density, team standards, newcomer performance) were restricted to either high or low levels, and were skewed either positively or negatively. This claim is based on the comparison made between observed and maximum possible variances, as well as the skewness statistics produced in the analysis. Given that team density (skewness = .90; SE = .35) and team standards (skewness = -.64; SE = .35) scales were positioned on 1-7 point scales, maximum *SD* was roughly 3. On the other hand, observed *SD*s for team density and team standards were .52 and .55, respectively. Moreover, given that newcomer performance (skewness = -1.16; SE = .17) was measured on a 0-100 point scale, maximum *SD* was roughly 50, whereas observed *SD* for newcomer performance was 7.58.

The restriction of both team standards and newcomer performance to high levels is likely due to the ego-centric bias (i.e., consistent overestimation of performance levels and standards; Harris & Schaubroek, 1988). Future research can assuage this limitation by having outsiders rate both levels of

newcomer performance and team standards (or, when applicable, utilizing objective measures of performance and standards). Newcomers' peers and colleagues, for instance, may be able to provide reliable estimates of how well newcomers are performing. Additionally, ratings from multiple top executives/managers may be able to provide more objective ratings of team standards. This approach may help increase variance in both newcomer performance and team standards scores (cf. Hunter & Schmidt, 2004), and thus reduce the risk of attenuating coefficients.

Replicating these results with alternative measures of newcomer performance will be particularly important, as past meta-analyses have shown that self-evaluations do not correlate highly with the ratings of others (Conway & Huffcut, 1997; Harris & Schaubroek, 1988; Heidemeier & Moser, 2009). If it is the case that self- and other-ratings do not correlate highly, then alternative measures of newcomer performance might yield different results. The use of self-ratings is an obvious limitation here, which, as similarly recommended above, could be allayed by implementing other, more objective measures of newcomer performance. Subsequent empirical attempts would also benefit from using measures with multiple indicators of newcomer performance (as opposed to a one-item measure), as this would contribute to reliability, and thus attenuate measurement error (Nunnally, Bernstein, & Berge, 1967).

Despite the limitation of the one-item performance measure, it is important keep in mind that the *sine qua non* of measurement is validity. To wit, the optimal measurement of newcomer performance will depend on how accurately the construct of newcomer performance is represented. Thus, the focus is not so much on how much agreement there exists between self- versus other-ratings (e.g., Atwater, Ostroff, Yammarino, & Fleenor, 1998), but rather on which of the two is deemed the most valid approximation of performance. Given the nature of RA work, one might question the validity of evaluations that come from others that do not see them perform (ACDs). Indeed, given the somewhat independent nature of the RA role, RAs' self-evaluations of their performance may be better indicators of their true performance scores than others' evaluations. As such, researchers should consider the possibility that self-evaluations are better indicators of performance in some instances, but poorer indicators in others. Ultimately, the nature of the member's role, as well as the team's level of task-interdependency, will likely guide this question.

The substantive reason responsible for restriction in team density scores raises both interesting and potentially fruitful exploratory questions. Specifically, the author is unable to think of any immediate psychological reason that might parsimoniously explain why responses about advice-seeking

activity would be biased in any specific direction. Instead, restriction in team density scores may be due to a previously raised issue: for some teams, team density is not a property considered integral to the effectiveness of its members. To wit, if it is to be argued that RAs are primarily independent during task completion, then it follows that the formation of compact teams would presumably be stifled. Moreover, if density is not a property essential to fostering both team and newcomer performance, then introducing this property without any additional, beneficial properties may foster, as opposed to mitigate, lower levels of newcomer performance.

CONCLUSION

It should be clear to the reader that future investigations of this ilk will undoubtedly need to rely on the theoretical underpinnings offered by both multilevel theory and the social network approach. In this study, for instance, density was conceptualized as a team-level factor. Consider, however, that the inclusion of ego-network density forces the consideration of density as an individual-level property, and thus the consideration of multilevel relationships. Moreover, these complex relationships are further expounded when variables at higher (or lower) levels of analysis are added to one's conceptual model (e.g., *departments* at a higher level; *time* at a lower level). Indeed, as these rich theoretical notions begin to creep into newcomer socialization research (cf. Manata et al., 2013), multilevel aspects of organizational networks will undoubtedly force this type of theoretical thinking (Borgatti et al., 2009; Kozlowski & Bell, 2012).

It should be recognized, however, that the implementation of these two approaches leaves us with the uncomfortable notion that newcomer success is in part a function of factors that one has little control over. For instance, given the negative effects of team density evidenced here, one is left with the question: do newcomers (or organizations) have the ability to change extant team network patterns? Indeed, being able to

accomplish this task constitutes a formidable challenge and thus seems unlikely. Specifically, such a drastic change would require either (a) complete overhauls in personnel (Schneider, 1987), or (b) a change in team structure or patterns of operation (e.g., Barker, 1993). Newcomers are unlikely to accomplish either of these on their own, especially as they attempt to acclimate to organizational values, norms, and beliefs.

APPENDIX

APPENDIX: Survey Instrument

RA NETWORK STUDY

Name_____

Last Six Digits of your PID_____

1. **What is your position within the RA network?**
   a. Resident Assistant
   b. Assistant Community Director
   c. Community Director

2. **Roughly how long (in months) have you worked in your position?**
   a. _____

3. **Are you returning to your sub-staff this year, or are you new to your sub-staff?**
   a. I am a returning RA/member
   b. I am a first-year RA/member

4. **What is your sex? (circle one) Male / Female**

5. **What is your age in years? _____ years**

6. **What year are you in school? (circle one)**
   a. 1st year (Freshman)
   b. 2nd year (Sophomore)
   c. 3rd year (Junior)
   d. 4+ years (Senior)
   e. Graduate Student (M.A. or Ph.D.)

7. **Please indicate your ethnicity by placing a checkmark next to one (or more):**

   ____ African
   ____ Black/African American
   ____ Asian
   ____ Hispanic
   ____ Caucasian/White
   ____ Indian sub-continent
   ____ Latino/Latina
   ____ Middle-Eastern
   ____ Multi
   ____ Native American/First Nation
   ____ Pacific Islander/Native Hawaiian
   ____ Other

8. **Have you already received your December performance evaluations from your ACD?**
   a. NO, I have not received my December performance evaluations from my ACD
   b. YES, I have received my December performance evaluations from my ACD

Below you will find a list of RAs that are in your sub-staff (ACD included). If, <u>between weekly staff meetings</u>, you seek advice from and communicate with any of these individuals about work-related issues, place an X next to their names and indicate how frequently these communicative interactions occur. Everyone on this list could receive an X, or no one could receive an X. Please ignore your own name.

1. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

2. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

3. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

4. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

5. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

6. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

7. [*insert member name here*] _____
   a. How frequently do you seek advice about work-related information from this individual?

      Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

8. [*insert member name here*] _____

a. How frequently do you seek advice about work-related information from this individual?

Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

9. [*insert member name here*] _____

a. How frequently do you seek advice from about work-related information from this individual?

Less Than Once a Week 1 2 3 4 5 6 7 **Several Times a Day**

When answering these next questions **about your sub-staff**, consider the REHS performance evaluation categories:

- Genuine Connections w/ Residents
- Developing Community
- Safety & Security
- Educator
- Team Player
- Leader
- Administrator

1. Members on my sub-staff maintain high standards of performance.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

2. Members on my sub-staff set an example by working hard themselves.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

3. Members on my sub-staff encourage each other to give their best efforts.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

4. Of the performance feedback I have received thus far, I think my ACD is a harsh evaluator.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

5. When members on my sub-staff work together, it feels like an integrated experience.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

6. Members on my sub-staff are unified when working together.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

7. Members on my sub-staff work well with each other.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

8. Members on my sub-staff get along with each other when working together.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

9. Members on my sub-staff have conflicting aspirations for the sub-staff's performance.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

10. I do not enjoy being a part of my sub-staff.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

11. I do not want to be friends with those on my sub-staff.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

12. I would have rather preferred being in a sub-staff with other people.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

13. Members in my sub-staff make me feel uncomfortable.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

14. If given the chance to work with my sub-staff again, I would take it.

Strongly Disagree 1 2 3 4 5 6 7 **Strongly Agree**

Instructions: The following question asks you to think about and rate the performance quality of RAs in your sub-staff. It is important that you respond to this question honestly, being as accurate as possible.

Please the question carefully and write your numerical response in the space provided after the question text. As noted in the question text, rate the RA's performance quality using a percentage-based scale that ranges from 0-100%. Please round your response to the nearest *whole number* (i.e., you may use any integer between 0-100, e.g., 79 or 82, do not use decimals).

1. If I were to rate my personal performance as an RA on a scale that ranges from 0% (low quality) to 100% (high quality), I would rate my own performance as:
   My personal performance: _____ %

<u>THE FOLLOWING QUESTIONS ARE FOR RAS ONLY</u>. ACDs: do not answer these questions.

1. Do you usually know how satisfied your ACD is with what you do?
   a. Never know where I stand
   b. Seldom know where I stand
   c. Usually know where I stand
   d. Always know where I stand

2. How well do you feel that your ACD understands your problems and needs?
   a. Not at all
   b. Some but not enough
   c. As much as the next person
   d. Fully

3. How well do you feel that your ACD recognizes your potential?
   a. Not at all
   b. Some but not enough
   c. As much as the next person
   d. Fully

4. Regardless of how much formal authority your ACD has built into his or her position, what are the chances that he or she would be personally inclined to use power to help you solve problems in your work?
   a. No chance
   b. Might or might not
   c. Probably would
   d. Certainly would

5. Again, regardless of the amount of formal authority your ACD has, to what extent can you count on him or her to ''bail you out'' at his or her expense when you really need it?

   a. No chance
   b. Might or might not
   c. Probably would
   d. Certainly would

6. I have enough confidence in my ACD that I would defend and justify his or her decisions if he or she were not present to do so.

    a. Probably not
    b. Maybe
    c. Probably would
    d. Certainly would

7. How would you characterize your working relationship with your ACD?

    a. Less than average
    b. About average
    c. Better than average
    d. Extremely effective

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