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Individual employees' multiple team membership: a double-edged sword

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CHAPTER 4

Multiple Team Membership and Individual Job Performance: The Role of an Employee's Information-Sharing Network

ABSTRACT

This chapter employs a social capital perspective to examine if an employee's multiple team membership (MTM) indirectly offers the potential for performance benefits and detriments, depending on the characteristics of his or her information-sharing network. To test our predictions, we gathered social network data at a research organization in the Netherlands. We found that MTM was indirectly associated with an employee's overall job performance by increasing the size of his or her information-sharing network. As expected, however, this indirect relationship was contingent on the average strength of an employee's network ties (i.e., the frequency of the respective interactions), such that MTM only improved performance when network ties were relatively weak. The indirect relationship between MTM and individual job performance became negative, by contrast, when employees' network ties were relatively strong. Together, these findings advance our understanding of the interpersonal mechanisms and contingency factors that shape the performance consequences associated with individuals' concurrent membership in multiple teams.

Research organizations increasingly use project teams to bring together members with different knowledge bases and types of expertise (Edmondson & Harvey, 2017; Wuchty, Jones, & Uzzi, 2007). Within such project team-based structures, it is rather common that individual employees (e.g. R&D employees, software programmers, academic professionals) participate in more than one team at the same time, balancing the requirements of a particular project with responsibilities in other teams (Cummings & Haas, 2012; Mortensen, 2014). Studies estimate that such multiple team membership (MTM) occurs among at least 80% of knowledge-workers across Europe and the US (Mortensen, Woolley & O'Leary, 2007; O'Leary et al., 2011a).

Recognizing MTM as a common and potentially useful organizational practice, a number of studies have examined its consequences for important organizational outcomes (Cummings & Haas, 2012; Rapp & Mathieu, 2018). Theorists have suggested, for example, that individual employees' MTM may advance their job performance by expanding their social networks, allowing them to transfer key resources and ideas across multiple teams and projects (O'Leary et al., 2011a; Wageman, Gardner, & Mortensen, 2012). Indeed, recent empirical research suggests that higher MTM is associated with long-term improvements in an employee's overall job performance across multiple teams and tasks (Chan, 2014; Van de Brake, Walter, Rink, Essens, & Van der Vegt, 2018).

At the same time, there are good theoretical reasons to expect that MTM's performance consequences are not universally positive. Given that MTM often involves highly complex and demanding social contexts (Mortensen et al., 2007), scholars have argued that some employees may experience their MTM as a source of interpersonal conflict and role overload (rather than more positive, potentially performance-enhancing social situations; Kauppila, 2014; Pluut, Flestea, & Curşeu, 2014; Zika-Viktorsson, Sundström, & Engwall, 2006). As such, it appears important to further examine key mechanisms and boundary

conditions that explain *how* and *when* MTM improves (or hinders) an individual employee's performance on the job. In the present research, we build on social capital theory (Lin, 1999, 2002) and the social networks literature (Borgatti & Foster, 2003; Kwon & Adler, 2014) to identify such mediating and moderating factors in the MTM-employee performance linkage.

First, individual MTM requires employees to cooperate with other individuals across multiple distinct teams (O'Leary, Woolley, & Mortensen, 2011b). Within each of these teams, members need to utilize and share resources (e.g., task-related help, knowledge, expertise) to complete interdependent tasks and achieve common goals (Krackhardt, 1992; Rost, 2011; Van der Vegt, Van de Vliert, & Oosterhof, 2003). Hence, we draw on social capital theory, one of the most prominent perspectives on interpersonal resource transactions (Lin, 1999, 2002), to examine whether MTM expands an employee's information-sharing network by exposing him or her to a greater number of team members that can provide access to a wider variety of information resources (e.g., novel ideas, useful expertise; Krackhardt, 1992). Employees with high MTM may subsequently utilize these resources to achieve superior job performance (Vedres & Stark, 2010). As such, our conceptual model casts an employee's number of network ties (i.e., the size of his or her information-sharing network) as a key mediating mechanism that may explicate MTM's potential performance implications.

Second, we amend this social capital perspective with insights from social networks research to posit that information-sharing relationships (also known as network ties) differ in the extent to which they can provide relevant and useful information, depending on the strength of a network tie (i.e., the frequency and intensity of the respective interaction; Krackhardt, 1992). Scholars have frequently used Granovetter's (1973) theory on the strength of weak ties to analyze the role of interpersonal connections for individuals' resource attainment and subsequent performance outcomes (e.g., Hansen, 1999; Perry-Smith & Shalley, 2014). On this basis, we propose that the strength of an employee's network ties

functions as a key boundary condition in the relationship between his or her information-sharing network size and overall performance.

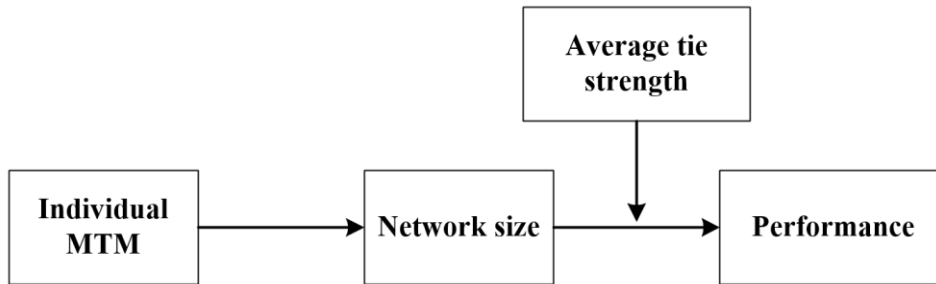
Drawing this argumentation together, we argue that MTM offers the potential for performance benefits *and* detriments, by increasing the size of an employee's information-sharing network (see Figure 4.1). However, the direction of the indirect MTM-performance relationship should critically hinge on the strength of the respective network connections. When MTM results in a greater number of relatively weak information-sharing network ties, this offers the potential for performance benefits by increasing an employee's access to novel and useful information resources (Granovetter, 1973; Reagans & Zuckerman, 2001). When the information-sharing network ties emanating from higher MTM are relatively strong, by contrast, it may distract an employee from his or her core tasks (without providing the knowledge benefits associated with weaker ties), and may therefore reduce rather than improve his or her job performance (Mehra, Kilduff, & Brass, 2001).

We test these predictions using a social network study design, which allows us to examine both the size of an individual's information-sharing network and the strength of the respective network ties as a key mechanism and boundary condition in the MTM-performance linkage, respectively. By doing so, this study responds to recent calls for empirical research on MTM's consequences for individual job performance (Bertolotti, Mattarelli, Vignoli, & Macrì, 2015; Van de Brake et al., 2018), and sheds new light on the mechanism and contingency factors underlying this association. Furthermore, we extend prior theorizing that has alluded to MTM's potential benefits and disadvantages (e.g., Mortensen et al., 2007; O'Leary et al., 2011a) by incorporating insights from the literature on social networks (e.g., Ibarra, 1993; Reagans & Zuckerman, 2001). Altogether, our study provides a clearer picture of the type of network structures that enable MTM's performance advantages and disadvantages to unfold. A better understanding of these aspects is vital for improving the

design of contemporary knowledge jobs.

FIGURE 4.1

Conceptual Model



THEORY AND HYPOTHESES

Following prior research, we define individual MTM as the number of teams to which an employee allocates working time during a specific period (e.g., per week; Van de Brake et al., 2018). When such MTM is higher, an employee is simultaneously involved in a greater number of teams, whereas an individual with lower MTM spends his or her working time in only one or a few concurrent teams. Recent research suggests that employees with MTM experience unique work demands and opportunities that decisively shape their behaviors and social experiences at work (e.g., O'Leary et al., 2011a; Pluut et al., 2014). In what follows, we will explore how MTM relates to an employee's information-sharing network and overall performance on the job.

MTM and the Size of an Individual's Information-Sharing Network

We draw on Lin's (1999, 2002) network theory of social capital to specify how MTM may shape an individual employee's job performance. This theory suggests that an individual's information-sharing network entails valuable resources, such as knowledge, instrumental support, and expertise (Thompson, 2005). Social capital theory, then, casts an individual's information-sharing network as a key antecedent of his or her job performance

(Cross & Cummings, 2004; Kwon & Adler, 2014). Drawing from this theoretical backdrop, we propose that individual MTM enlarges an employee's information-sharing network and, thus, may enable him or her to achieve superior performance levels (also see O'Leary et al., 2011a).

We expect that higher MTM increases the number of coworkers with whom an employee can regularly share information about work-related topics (Mehra et al., 2001; Perry-Smith, 2006). MTM implies, after all, that an individual employee simultaneously collaborates with various coworkers across multiple teams (O'Leary et al., 2011a). It is important to note, in this regard, that MTM's consequences for an employee's information-sharing network extend beyond the sheer number of coworkers with whom he or she collaborates, because these coworkers are distributed across a number of different teams. Within these teams, members typically are highly interdependent, such that they need to share information about their task progress, deadlines, and available resources to achieve joint goals (Mesmer-Magnus & DeChurch, 2009; Van der Vegt, Van de Vliert, & Oosterhof, 2003). Consequently, MTM may give an employee a more extensive overview of the available information resources within his or her direct task environment (Lewis, 2004; Lin, 1999), and he or she may be able to access and use the resources embedded within their different teams with relative ease (Choi & Thompson, 2005; Perry-Smith, 2006). Together, this suggests that MTM greatly expands an employee's information-sharing network, and as such, increases his or her access to potentially useful information resources.

When an employee's MTM is more limited, by contrast, his or her information-sharing network is likely to remain confined to only one or a few teams. In such circumstances, the respective employee will collaborate with a relatively limited number of coworkers, restricting his or her access to informational resources. Hence, we expect that employees'

information-sharing networks are smaller when their MTM is lower. Altogether, we therefore suggest:

Hypothesis 1. An employee's multiple team membership is positively related to the size of his or her information-sharing network.

Information-Sharing Network Size and Tie Strength

Scholars generally agree that a larger information-sharing network may be particularly useful in the context of knowledge-intensive work, where employees frequently need to pool their information resources in order to perform their tasks (Alvesson, 1993; Edmondson & Harvey, 2017). At the same time, theorists within the social networks literature have long argued that some information-sharing connections (i.e., network ties) may be more useful for an employee's performance than others (Cross & Cummings, 2004; Granovetter, 1973). Information-sharing ties are particularly beneficial, on the one hand, when they provide access to novel informational resources that help to solve complex, non-routine, or unexpected issues (Kwon & Adler, 2014). Ties that predominantly contain redundant information (i.e., perspectives or knowledge already available within an employee's direct task environment; Edmondson & Harvey, 2017; Jentsen & Greve, 2002), on the other hand, may require more maintenance and provide less useful inputs for performance enhancement (Krackhardt, 1992; Rook, 1984).

To specify these notions, network scholars have emphasized that besides the *number* of an individual's information-sharing ties (i.e., the size of one's social network), the *strength* of the respective ties are a critical factor that can determine a network's utility for a focal individual (Granovetter, 1973). Weaker ties are characterized by less frequent and less intense interactions (e.g., acquaintances and distant colleagues; Krackhardt, 1992; Perry-Smith, 2006), in this regard, whereas stronger network ties reflect closer connections between individuals with frequent interactions (e.g., friends and close colleagues). Furthermore,

Granovetter's (1973) theorizing suggests that strong versus weak network ties differ markedly in their specific implications (see also Hansen, 1999).

Individual employees may differ greatly in the extent to which they develop stronger or weaker network ties across multiple teams (based on their specific, unique combination of team types and requirements; Mortensen et al., 2007), and we expect that the size of an individual's information-sharing network is not related to the average strength of these respective network ties. As noted before, individual MTM implies that an employee needs to share information about common goals and interdependent tasks with a large number of co-workers across multiple teams. These teams may differ remarkably, however, in the frequency to which members engage in information-sharing interactions (see Cohen & Bailey, 1997; Salas, Burke, & Cannon-Bowers, 2000). Project-specific requirements (e.g., task complexity, interdependence types; Hansen, 1999; Ruef, 2002), for example, and contextual factors (e.g., client requirements, environmental uncertainty; Duncan, 1972), often determine the extent to which teams require more frequent (and therefore stronger) information-sharing ties to operate effectively.

Building on this conceptual fundament, we argue that fully understanding MTM's performance consequences requires moving beyond its implications for the size of an individual's information-sharing network by also taking into account the strength of the respective network ties. Weaker ties may be useful for those employees who work in knowledge-intensive teams, in particular, because these ties (a) typically connect with relatively dissimilar others that hold different ideas and perspectives and have access to different sources of information than the focal individual (Granovetter, 1973), and (b) can be maintained with minimal time expenditures (i.e., are highly efficient; Levin, Walter, & Murnighan, 2011). The novel and non-redundant information accessible through such weak network ties may help employees to solve complex, unforeseen, and non-routine problems

that they encounter, and it may provide them with alternative task approaches, innovative ideas, and opportunities for knowledge integration across their multiple teams (Hansen, 1999; Reagans & Zuckerman, 2001). Accordingly, research has demonstrated that weaker network ties are more likely to spark new ideas and foster individuals' performance (Perry-Smith & Shalley, 2014).

When information-sharing networks are relatively large *and* predominantly consist of weaker network ties, this provides efficient access to many non-redundant ideas across multiple teams (Alvesson, 1993; Krackhardt, 1992). Similarly, a larger number of weaker ties may allow an employee to integrate diverse insights from separate teams to create innovative work approaches (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Grant, 1996). Together, these unique information advantages may improve an employee's ability to create innovative solutions to complex problems (Edmondson & Harvey, 2017). Consequently, we expect that a larger information-sharing network improves an employee's performance when his or her respective network ties are, on average, relatively weak.

Stronger ties, by contrast, require substantially more time and attention than weaker network ties (Krackhardt, 1992), and may be less useful for providing the unique, non-redundant types of information and resources required for superior performance in knowledge jobs. A key reason is that individuals tend to form stronger connections with people that are similar to themselves (e.g., with similar expertise and perspectives), and that individuals who interact more frequently tend to become even more similar in terms of knowledge and experiences over time (Marsden & Friedkin, 1993). Accordingly, network research has reported that stronger ties are less likely to provide access to novel, non-redundant information that is otherwise not available in one's social surrounding (Krackhardt, 1992; Perry-Smith & Shalley, 2014; Reagans & Zuckerman, 2001).

When information-sharing networks are relatively large *and* predominantly consist of stronger network ties, the associated resource advantages and, hence, the potential performance benefits of a larger network should remain limited (Krackhardt, 1992; Hansen, 1999). Under these circumstances, a large network is more likely to hold redundant information sources and overlapping perspectives, and, therefore, has limited potential to improve an employee's performance across multiple teams (Granovetter, 1973). Consequently, maintaining a large number of relatively strong information-sharing ties may distract employees from their core task responsibilities, so that they eventually run out of time and other resources required to perform efficiently and effectively on the job (Mehra et al., 2001; Rook, 1984). Hence, we expect that a larger information-sharing network decreases an employee's performance when his or her respective network ties are, on average, relatively strong. Altogether, we therefore hypothesize:

Hypothesis 2. Tie strength moderates the relationship between the size of an employee's information-sharing network and his or her job performance. This relationship is positive when an employee's information-sharing ties are weaker, and negative when his or her information-sharing ties are stronger.

MTM's Indirect Performance Consequences

Our reasoning above suggests that individual MTM may positively associate with an employee's access to informational resources by expanding the size of his or her information-sharing network (Hypothesis 1). A greater MTM-based information-sharing network may, in turn, improve an employee's job performance, provided that these network ties are relatively weak. When information-sharing ties are stronger, by contrast, a larger network is expected to decrease an employee's performance (Hypothesis 2).

Logically, then, we would expect that MTM is indirectly related to an employee's job performance in a pattern of moderated mediation (cf. Preacher, Rucker, & Hayes, 2007). This

indirect relationship should be positive if the information network ties emanating from an employee's MTM are weaker (i.e., network size is relatively large, tie strength is relatively weak) and, thus, provide non-redundant ideas and solutions that can promote performance outcomes. In such circumstances, MTM may enable employees to transfer novel and useful information from one team context to another (e.g., asking an expert coworker from one team to solve an issue in another team; Burt, 1992), and to integrate insights from separate teams into new and unique perspectives on important issues (Amabile et al., 1996).

If the information-sharing network ties resulting from MTM are stronger (i.e., network size is relatively small, tie strength is relatively strong), however, their associated information advantages and, hence, the potential performance benefits should remain limited (Granovetter, 1973). Under these circumstances, higher MTM adds redundant information-sharing ties that, even though they span multiple teams and social contexts, (a) do not provide novel and useful information resources and (b) potentially distract from more important tasks and responsibilities (Krackhardt, 1992; Lin, 1999). Taken together, we hypothesize a conditional indirect relationship between individual MTM and job performance, with the overall size of an employee's information-sharing network as a key mediating mechanism and the average strength of the respective network ties as a crucial moderating factor.

Hypothesis 3: MTM is indirectly related to an employee's job performance, by increasing the size of his or her information-sharing network on the job. This indirect relationship is positive when an employee's information-sharing ties are weaker, and negative when his or her information-sharing ties are stronger.

METHOD

Sample and Procedure

We examined our hypotheses in a sample of employees from a large applied research organization in the Netherlands. Within this organization, work was conducted in projects

formed around specific research assignments (e.g., contract research for the Dutch government, military, or private companies). The organization consists of 23 locations across the country, and we specifically targeted researchers from one organizational location in the mid-west of the Netherlands ($N = 109$). This location housed three broad departments that carried out projects in related research areas (i.e., perception and cognition, training and learning, and human behavior). Most of the location's project teams included employees from at least two of these departments, and individual employees regularly participated in more than one project during the same time period. Altogether, this provided a viable context for examining our conceptual model.

We collected data from three independent sources to minimize common method concerns. First, we used weekly work hour registrations from the host organization's personnel records to capture each participant's MTM. Employees were obliged to register the number of work hours spent on different projects in a very detailed manner. The organization used this information for billing purposes and to calculate project costs, and project managers monitored the accuracy of these registrations. The organization provided these registrations for four months prior to our survey. Second, a trained assistant approached all employees at the target location to ask for their cooperation in completing a social network questionnaire. Seven of the potential participants could not be reached due to longer-term absences. The remaining 102 employees were informed that participation was voluntary and responses confidential. Third, we distributed another survey among the three department supervisors at the target location, asking them to rate their individual subordinate employees' overall performance.

A total of 76 out of the 102 eligible employees (representing a 75 percent response rate, a percentage that is similar to prior network studies; e.g., Hansen, 1999; Rost, 2011) completed the social network survey. These individuals were highly educated (i.e., had at

least a master's degree), worked on a full-time basis, had a mean age of 43 years, and they had been working with the organization for an average of 13 years. Moreover, MTM was relatively common among these employees, as they were simultaneously involved in approximately 3 to 4 teams per week during the study period.

Measures

Multiple team membership. Following prior research (e.g., Pluut et al., 2014; Van de Brake et al., 2018), we measured MTM as the number of project teams in which an employee was actively and concurrently involved. Specifically, we used formal work-hour registrations to capture the number of teams to which an individual allocated time during each specific week. We averaged this measure across all available weeks (i.e., 17 weeks in total). Hence, the present MTM measure depicts an employee's average number of active teams per week.

Information-sharing network characteristics. All respondents received an alphabetical list of the 109 researchers employed at the target location, and we asked the respondents to mark each individual with whom they had exchanged information about work-related topics during the past six months (Mehra et al., 2001; Perry-Smith, 2006). Subsequently, respondents assessed how frequently they were in contact with the marked individuals on a 7-point scale (1 = "once in the past six months", 7 = "several times a day"). Following previous research (Hansen, 1999; Uzzi, 1999), we captured the *size* of an employee's information-sharing network by summing the number of network ties reported on the first measure, and we used the average frequency of these interactions (as reported on the second measure) to capture the *strength* of the respective ties.

Job performance. Each of the three departments in our sample was led by a different supervisor. These supervisors interacted with our sample respondents on a regular basis, and they were formally required, by the organization, to closely monitor their subordinates' performance. Hence, we asked each of these supervisors to evaluate the performance of the

individual employees within their respective departments (Rotundo & Sackett, 2002). They received a list with the names of their direct subordinates and were asked to rate how each employee performed on three separate criteria: their overall performance, work efficiency, and work quality (Ancona & Caldwell, 1992; Liden, Wayne, & Sparrowe, 2000). The response scale for these items ranged from 1 (far below average) to 7 (far above average), and Cronbach's alpha for the three-item survey measure was .84.

Control variables. Previous research suggests that performance evaluations are often biased by gender (e.g., favoring male over female employees; Inesi & Cable, 2014) and organizational tenure (e.g., favoring employees with lower rather than higher tenure; Ng & Feldman, 2010). Hence, we incorporated these demographic variables as potential covariates. In addition, we included two department dummy variables to control for potential biases in supervisors' performance ratings (cf. Snijders & Bosker, 1999).

Analytical Strategy

We used structural equation modeling in Mplus version 7 (Muthén & Muthén, 1998) to test the conditional indirect relationship suggested in our Hypotheses. Job performance was included as a three-item latent construct, all other variables were included as single item measures. The hypothesized model provided a good fit with the current data ($\chi^2 = 35.35$, $df = 25$, $p > .05$; RMSEA = .07, CFI = .95, SRMR = .08; cf. Hu & Bentler, 1999). As recommended by Hayes (2009, see also Maxwell & Cole, 2007), we computed 1000 bootstrapped parameter estimates and associated 95% confidence intervals to test the indirect relationship between MTM and performance (through the size of an individual's social network) at higher (+1SD) and lower (-1SD) levels of average network tie strength. All predictors were standardized to ease the interpretation of our findings (Grewal, Cote, & Baumgartner, 2004).

RESULTS

Descriptive Statistics

Table 4.1 presents means, standard errors, and correlations for all study variables. As expected, MTM was positively related to the size of an employee's social network ($r = .35$; $p < .01$), and unrelated to the strength of his or her information-sharing ties ($r = .17$; $p > .10$). Moreover, MTM was positively associated with job performance ($r = .37$; $p < .01$). Regarding the control variables, gender was related to information-sharing network size ($r = .34$; $p < .01$) and average tie strength ($r = .26$; $p < .01$), such that males had both larger and stronger information-sharing networks. The two department variables were highly correlated with job performance ($r = -.45$ and $.50$; $p < .01$), indicating that supervisor performance ratings were indeed nested within departments. There were no significant differences between the departments, however, with respect to MTM, employees' network size, and average tie strength. To improve the parsimony of our structural equation model, the department variables were therefore excluded as predictors for network size (cf. Becker, 2005).¹¹

¹¹ As expected, the department variables did not predict an employee's information-sharing network size and tie strength. The structural equation model had a slightly worse fit when these relationships were included ($\chi^2_{\text{difference}} = 2$, $df_{\text{difference}} = 2$, $p > .05$; $RMSEA_{\text{difference}} = .01$, $CFI_{\text{difference}} = .01$, $SRMR_{\text{difference}} = .00$), and all parameter estimates were exactly the same. The significance levels were also similar, with one notable exception. The conditional indirect relationship between MTM and performance at tie strength -1 SD was marginally significant at $p < .10$, rather than at $p < .05$ (as reported in this chapter). All in all, we decided to report the model with more degrees of freedom and the best fit to our data.

TABLE 4.1

Means, Standard Deviations, and Pearson Correlation Coefficients

Variable	Mean	SD	1	2	3	4	5	6	7
1. Tenure (years)	12.63	8.18							
2. Gender ($F=0, M=1$)	.54	.50	.47**						
3. Department 1	.33	.47	-.10	-.16					
4. Department 2	.30	.46	.01	.09	-.46**				
5. MTM	3.36	1.24	-.13	.06	-.17	.18			
6. Network size	21.06	9.94	.11	.34**	-.13	.15	.35**		
7. Average tie strength	2.92	.61	-.01	.26*	-.20	.22	.17	-.17	
8. Performance	4.97	.85	-.12	-.05	-.45**	.50**	.37**	.11	.07

Note. $N = 76$ individuals.

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

Hypothesis Testing

As shown in Table 4.2, individual employees' MTM was positively associated with the size of their information-sharing networks ($B = .28, SE = .11, p < .01$), even after controlling for gender and tenure. Hence, we found support for Hypothesis 1. Further, as predicted in Hypothesis 2, the relationship between information-sharing network size and job performance was contingent on the average strength of an employee's network ties, as indicated by a significant interaction coefficient ($B = -.21, SE = .08, p < .01$; Aiken, West, & Reno, 1991). As shown in Figure 4.2, the linkage between information-sharing network size and job performance was positive among employees with weaker information-sharing ties (simple slope at $-1 SD = .18; p < .10$), whereas this linkage was negative for employees with stronger ties (simple slope at $+1 SD = -.23; p < .05$).

To test Hypothesis 3, we examined the conditional indirect relationship between MTM and job performance via information-sharing network size, at varying levels of average tie strength. We found this conditional indirect relationship to be positive and significant when average tie strength was relatively low (estimate at $-1SD = .05, 95\% CI = .001$ to $.161$). The

conditional indirect relation was significantly negative, by contrast, when average tie strength was relatively high (estimate at +1SD = -.06, 95% CI = -.181 to -.015). In sum, these results offer support for Hypothesis 3. As expected, we found that MTM was indirectly and positively related to an employee's job performance, by increasing the size of his or her information-sharing network on the job, provided that the respective network ties were relatively weak. The indirect relationship became negative, by contrast, when employees' network ties were relatively strong.

In addition, we note that the direct relationship between MTM and job performance remained significant ($B = .30$, $SE = .08$, $p < .01$) even after accounting for the social network mechanisms postulated in our hypothesis (see Table 4.2). As such, the present results point towards a pattern of partial mediation. Aside from the interaction of network size and tie strength, other mechanisms seem to be present that also account for MTM's performance consequences. We will further address this issue in the Discussion section.

TABLE 4.2

Moderated Mediation Results for the Conditional Indirect Relationship Between MTM and Job Performance

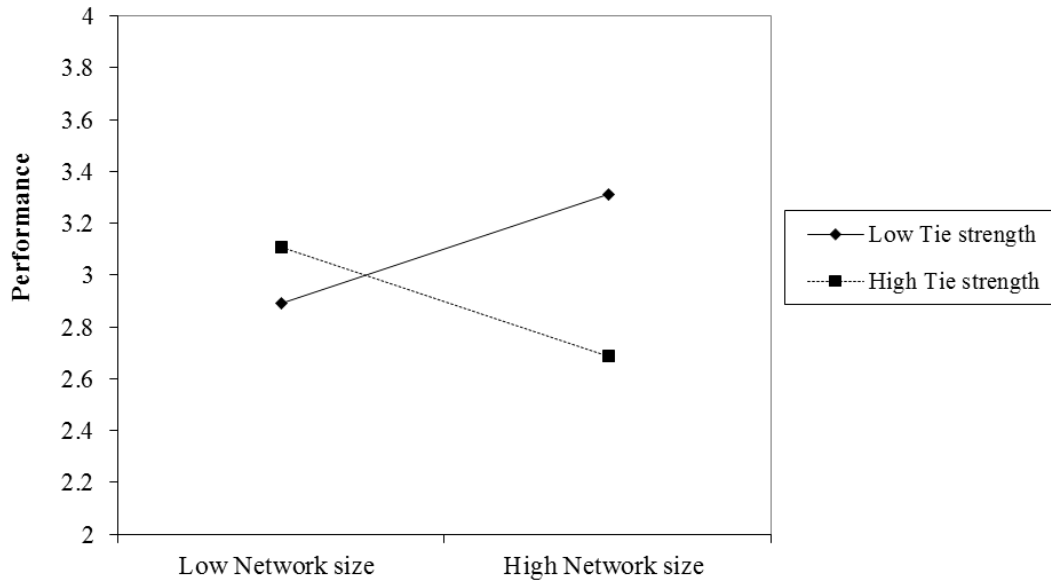
Predictors	Dependent variables				
	Network size		Job performance		
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	
Tenure	-.13	.13	-.01	.10	
Gender (<i>F</i> =0, <i>M</i> =1)	.89**	.25	-.12	.21	
MTM	.28**	.11	.30**	.08	
Network size			-.02	.08	
Average tie strength			-.10	.08	
Department 1			-.51*	.18	
Department 2			.63**	.21	
Network size × average tie strength			-.21**	.08	
Conditional indirect relationship			95% CI:	95% CI:	
MTM to performance via network size			Estimate	Lower bound	Upper bound
Tie strength -1SD			.05*	.001	.161
Average tie strength			-.01	-.064	.042
Tie strength +1SD			-.06*	-.181	-.022

Note: *N* = 76 individuals. Predictors were standardized. Unstandardized coefficients are reported.

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

FIGURE 4.2

Interaction of Information-Sharing Network Size with Average Tie Strength in Predicting Job Performance



DISCUSSION

Many of today's employees – particularly those in knowledge-intensive jobs – work in multiple teams at the same time (O'Leary et al., 2011a; Rapp & Mathieu, 2018). The present chapter aimed to provide new insights into *how* and *when* an employee's respective MTM relates to his or her overall job performance (O'Leary et al., 2011a; Vedres & Stark, 2010). Building on the social capital and social network literature, we examined whether MTM creates information-sharing network positions that, in turn, improve or hinder an employee's performance.

Depending on the average strength of an employee's information-sharing ties, MTM was indirectly associated with higher *or* lower performance ratings. More specifically, there was a positive indirect relationship between MTM and job performance, through the size of an employee's information-sharing network, when his or her network ties were relatively weak. It appears that, in such circumstances, MTM offers greater access to useful

informational resources embedded within different teams. We found a negative indirect relationship between MTM and job performance, by contrast, when network ties were relatively strong. Here, multi-teamers may find that the potential benefits of a large information-sharing network are offset by the costs of maintaining each relationship (Mehra et al., 2001).

Theoretical Implications

Together, these findings make several important contributions to the literature on teams, MTM, and social capital in organizations. First, empirical research on organizational work teams has focused primarily on stable teams with individuals conceptualized as members of one particular team (Wageman et al., 2012). In reality, however, many organizational teams represent unstable entities with ambiguous boundaries (Mortensen, 2014), and individuals often work within multiple teams at the same time (O'Leary et al., 2011a). This trend has led to calls for empirical research on the network structures associated with individuals' concurrent memberships within different teams (Van de Brake et al., 2018; O'Leary et al., 2011a). The present investigation responds to these calls and illustrates the usefulness of a social network perspective in MTM research by showing that MTM's performance consequences hinge on the joint role of an individual's information-sharing network size and the strength of the respective ties.

Second, our findings resolve some of the ambiguity in the current literature regarding the performance benefits and disadvantages of individual MTM. On the one hand, our study supports the general theoretical notion that MTM can promote employees' job performance by providing them with important social capital resources (i.e., unique learning opportunities and knowledge advantages; O'Leary et al., 2011a, 2011b) – as indicated by a large information-sharing network that offers access to novel, unique, and non-redundant information (Granovetter, 1973; Lin, 1999). On the other hand, our study points towards

potentially negative consequences of MTM, even within knowledge-intensive jobs. Critical scholars have argued that employees with MTM need to process “a greater amount of information”, necessitating that “more of one’s time and effort must be spent adjusting to different team contexts” (O’Leary et al., 2011a: 468; see also Kauppila, 2014; Leroy, 2009). The present research suggests that MTM indeed associates with information-sharing disadvantages, in particular among employees that have developed strong interpersonal networks across multiple teams (Mehra et al., 2001; Rook, 1984). Altogether, this chapter uncovered an important pathway that explicates both *why* and *how* an employee’s MTM shapes his or her performance, thus providing an integrative perspective on previous claims about individual MTM’s possible performance benefits and disadvantages (e.g., Pluut et al., 2014; Van de Brake et al., 2018).

Finally, our findings contribute to theory development on the emergence of social capital in organizations. To date, most research on this issue has focused on employees’ personality traits, demographic characteristics and behavioral tendencies (e.g., Ibarra, 1993; Marsden & Friedkin, 1993; Mehra et al., 2001), whereas only a few studies have examined the role of organizational practices as an antecedent of structurally advantageous or disadvantageous social network positions (for an exception, see Zaheer & Soda, 2009). The present investigation addresses this shortcoming, highlighting MTM – an increasingly common work practice in contemporary organizations (O’Leary et al., 2011a) – as a key factor that may enable individuals to enlarge their information-sharing network on the job and, thus, to build unique social capital (dis)advantages (Lin, 1999). These results show that, beyond individual factors, contextual aspects play a key role in social capital development, broadening our understanding of the social capital construct.

Limitations and Future Research Directions

We acknowledge some limitations that further MTM research could address to

develop this relatively new field of inquiry. Although our research has methodological strengths (e.g., multi-source, time-lagged data), our relatively small sample came from a single organization in the Netherlands. This may limit the extent to which our results can be generalized to other organizational and cultural contexts. Furthermore, we used social network measures (i.e., number and strength of information-sharing ties) to capture an employee's access to performance-enhancing information resources, assuming that weaker ties connect to more novel and distinct information sources than stronger ties. Several network studies demonstrated that weak ties indeed generate unique information advantages (Borgatti & Foster, 2003; Kwon & Adler, 2014). Nonetheless, it is important that future research examines these network resources more directly (e.g., by measuring a respondent's access to task-related help, novel knowledge sources, and useful materials; Krackhardt, 1992).

Although our study illustrated information-sharing network size and average tie strength as important factors in the MTM-performance linkage, these social network characteristics only partially explained MTM's performance consequences (i.e., MTM's direct relationship with job performance remained significant in our study's moderated mediation model). Hence, the relevance of network aspects notwithstanding, future research could consider additional mediating mechanisms in order to provide a more comprehensive perspective on MTM's performance consequences. Locke and Latham's (2002) goal setting theory, for example, suggests that employees' goal-setting strategies may function as a key mechanism in the MTM-performance linkage. Building on this framework, future scholars could examine whether MTM motivates employees to align multiple concurrent work goals by, for example, increasing their work effort and task efficiency (LePine, Podsakoff, & LePine, 2005; see also Mortensen et al., 2007).

Finally, we did not examine potential boundary conditions for the relationship between individual MTM and the size of employees' information-sharing networks, and this

may be a worthwhile subject for future research as well. Some employees may be concurrent members in highly similar teams, for example, whereas others are immersed in a greater variety of team contexts (e.g., representing diverse organizational areas, clients, and task requirements; O'Leary et al., 2011a). For former employees, it is possible that they work with the same set of coworkers in multiple teams (e.g., in multiple projects for the same client, or within the same division or department), so that MTM's impact on the size of their information-sharing networks remains limited. Future empirical research could examine such variations in MTM contexts to further increase our understanding of the social network implications of individual MTM.

Practical Implications

Although most managers recognize the increasing prevalence of MTM, few have a complete understanding of how it affects their individual employees (see Mortensen & Gardner, 2017). The present chapter addresses this problem and, as such, has direct implications for the design and management of contemporary knowledge jobs. We found that employees' ability to navigate multiple concurrent team arrangements hinges on the characteristics of their information-sharing network. Consequently, it is important for managers to obtain a clear overview of multi-teamers' information-sharing requirements across multiple tasks and teams. Several social network assessments and intervention methods have been designed specifically for this purpose (e.g., Kleinbaum & Tushman, 2008; Valente, 2012), and these could be used to improve employees' overall performance on the job. Based on our results, for example, it appears that employees with collaborative tasks that require relatively modest amounts of interpersonal information sharing (see Cohen & Bailey, 1997; Salas, Burke, & Cannon-Bowers, 2000) can be assigned to additional teams to expand their network and improve performance. Employees with tasks that involve frequent and intense

information-sharing interactions, by contrast, may achieve optimal performance when they focus on one or only a few teams at the same time.

CONCLUSION

The present research aimed to uncover the social network mechanisms that explicate how an employee's MTM shapes his or her overall job performance. Our findings demonstrate that MTM is a double-edged sword that can both improve and harm an employee's functioning on the job, thus contributing to a more complete understanding of MTM's consequences for individual employees. We hope these findings will stimulate further research on employees' social network characteristics within and across teams, and help organizations to manage complex teamwork arrangements.