

ARE WORKPLACE FRIENDSHIPS A MIXED BLESSING? EXPLORING TRADEOFFS OF MULTIPLEX RELATIONSHIPS AND THEIR ASSOCIATIONS WITH JOB PERFORMANCE

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Theory and research note the ubiquity of multiplex workplace friendships—multifaceted relationships that superimpose friendship with work-focused interactions—but it is unclear how they compel or hinder job performance. In a study of insurance company employees ($n = 168$), we found that the number of multiplex workplace friendships in one's social network is positively associated with supervisor ratings of job performance. However, we also found that there is a negative indirect effect on job performance through emotional exhaustion, which is offset, in part, through enhanced positive affect. Results of a second study of restaurant and retail sales employees ($n = 182$) provide greater insight into the positive and negative effects of multiplex workplace friendships. Specifically, these relationships enhanced job performance through trust but detracted from job performance through maintenance difficulty. Collectively, our results illustrate that having a large number of multiplex friendships at work is a mixed blessing. Although the provision and restoration of resources fostered by multiplex relationships benefits employee job performance, these benefits are muted somewhat by the personal resources they deplete.

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Multiplex workplace friendships—those in which a personal, affective relationship coincides with a business relationship, namely, with coworkers within one's organization—are a widespread organizational phenomenon (Ingram & Zou, 2008). Indeed, a recent Gallup study determined that 30% of employees report having a best friend at work (Rath, 2006), and studies show that a sizeable number of employees describe their coworkers as both colleagues and friends (e.g., Gersick, Bartunek, & Dutton, 2000; Lonkila, 1998). Importantly, multiplex workplace friendships have implications for key employee and organizational outcomes through the provision of moral and material support, work and nonwork advice, and quality information exchanges (Kram & Isabella, 1985; Rawlins, 1992; Sias, 2005; Sias & Cahill, 1998; Winstead, Derlega, Montgomery, & Pilkington, 1995). For instance, employees who report having friends at work have higher levels of productivity, retention, and job satisfaction, and are seven times more likely to be engaged in their work than their "friendless" counterparts (Rath, 2006).

However, our understanding of the nature and functioning of multiplex workplace friendships is incomplete in two crucial ways. First, researchers to date may confound relationships that are largely one-dimensional (i.e., those composed exclusively of instrumental work-focused exchanges and those composed exclusively of affective, friendship exchanges) with workplace friendships that are multiplex (i.e., simultaneously comprising friendship and work-focused exchanges; Hayton, Carnabuci, & Eisenberger, 2012; Ingram & Roberts, 2000; Kuwabara, Lou, & Sheldon, 2010). For instance, in studies that link friendships to outcomes relevant to employee effectiveness, researchers potentially use pure friendships interchangeably with multiplex workplace friendships (e.g., Baldwin, Bedell, & Johnson, 1997; Chiaburu & Harrison, 2008; Jehn & Shah, 1997; Mehra, Kilduff, & Brass, 2001; Roberts & O'Reilly, 1979). Although this research has led to many insights, it is impossible to discern whether effects of workplace friendships can be attributed to friendship in and of itself, or friendship that is also interwoven with an instrumental component where individuals exchange work-related advice and information (Ibarra, 1993). Perhaps for this reason, current research reports that these relationships have positive (Moran, 2005; Sasovova, 2006), negative (Mehra et al., 2001) and nonsignificant (Baldwin et al., 1997; Roberts & O'Reilly, 1979) associations with individual performance outcomes. Thus, research that clearly and explicitly distinguishes multiplex workplace friendships from other workplace relationships could clarify equivocal findings.

Second, predominant research on friendships in the workplace has applied a social capital lens and has emphasized instrumental and relational benefits and support (AbuAlRub, 2004; Adler & Kwon, 2002;

Labianca & Brass, 2006; Wallston, Alagna, DeVellis, & DeVellis, 1983). Although some have suggested that interpersonal relationships at work may have potential liabilities (Adler & Kwon, 2002; Leana & Van Buren, 1999), the mechanisms responsible for these costs have not been explored. Consequently, we do not yet know how multiplex workplace friendships might hinder employee outcomes or what factors counteract these negative effects. For example, establishing and maintaining friendships requires investments of support and attention, and over time, these extra investments may be fatiguing. Similarly, the potentially conflicting expectations of “friend” and “coworker” roles can result in incompatible goals and misunderstandings, further depleting energy and personal resources (Bridge & Baxter, 1992; Ingram & Zou, 2008; Winstead et al., 1995; Wright, 1984). Thus, research is needed to gain understanding of these costs and to clarify mixed findings in this domain.

With these limitations in mind, our overarching purpose is to consider a more balanced explanation of the effects of multiplex workplace friendships. We draw from theories of high-quality connections (Dutton & Heaphy, 2003) and conservation of resources (COR; Hobfoll, 1989) to develop hypotheses regarding the positive and negative pathways through which multiplex workplace friendships influence employee job performance. We isolate friendships coupled with task-based interactions from relationships that are either purely based on friendship or are purely instrumental. This approach recognizes that workplace relationships are often multifaceted and that multiplex relationships serve different functions and place different demands on the parties relative to unitary relationships (i.e., those focused primarily on *either* task *or* social relations; Ingram & Zou, 2008; Moran, 2005); We also focus on how multiplex workplace friendships impact organizationally relevant outcomes by examining job performance—employee activities and behaviors that directly and indirectly contribute to organizational effectiveness (Borman & Motowidlo, 1993; Motowidlo & Van Scotter, 1994; Rotundo & Sackett, 2002). Scholars have long hinted at the role multiplex workplace friendships play in job performance (Krackhardt & Hansen, 1993; Lincoln & Miller, 1979; McEvily, Soda, & Tortoriello, 2014). Yet, although research has explored associations with phenomena presumed to correlate with job performance, such as organizational identification (Bullis & Bach, 1991) and unethical behavior (Brass, Butterfield, & Skaggs, 1998), the relationship with performance has not been directly considered. There are reasons to believe that performance is susceptible to the paradox presented by multiplex workplace friendships, and exploring this relationship is a needed step in establishing multiplex workplace friendships as a construct with significant theoretical and practical implications.

Next we describe two studies that jointly fulfill our goals. In Study 1, we broadly examine the basic idea that multiplex workplace friendships have a unique downside relative to other types of workplace relationships. That is, we consider exhaustion as a general mechanism that reflects the performance depleting effect of multiplex workplace friendships on individuals' personal resources. We also explore the restorative effects of multiplex workplace friendships; we argue that they generate positive emotional responses that counteract their energy sapping effect (Lilius, 2012; Roberts, 2007). In Study 2, we seek greater depth in our understanding of multiplex workplace friendships and their effect on job performance by contrasting positive indirect effects that are attributed to emotional support and trust on the one hand, with negative indirect effects attributed to maintenance difficulty and felt obligation on the other.

Theoretical Background and Hypotheses for Study 1

Linking Multiplex Workplace Friendships and Job Performance

As compared to purely social or task-based relationships, multiplex workplace friendships are characterized by complex individual roles and wide boundaries. Specifically, the information-sharing function of task-based relationships is fused with emotional support, feedback, and confirmation (Ibarra, 1993; Kram & Isabella, 1985; Lazega & Pattison, 1999; Rawlins, 1992; Sias, 2005; Sias & Cahill, 1998). High-quality relationships such as these, with multiple bases for interaction, are stronger than one-dimensional interactions (Brass, 1992; Dutton & Heaphy, 2003; Ibarra, 1993) because they involve a greater amount of time, emotional intensity, mutual confiding, and reciprocal services (Granovetter, 1973). However, it is unclear why multiplex workplace friendships may be qualitatively distinct from purely instrumental relationships or friendships, what types of contradictory dilemmas they may create, or how they might differentially influence job performance-related behaviors.

Conservation of resources theory proposes that people strive to retain, protect, and build resources, such as time and energy (Hobfoll, 1989). We integrate this theoretical lens with theory on high-quality connections to suggest that, in contrast to one-dimensional interactions where individuals may undermine the relationship to maximize their short-term advantage, individuals prioritize the needs and goals of multiplex workplace friends (Leana & Van Buren, 1999) by investing their energy to promote the effectiveness of the relationship (May, Gilson, & Harter, 2004). This may involve their physical energy (e.g., by investing time and presence to the interaction), their emotional energy (e.g., by providing empathy and benevolently looking out for the person's best interest), and their cognitive

energy (e.g., by vigilantly paying attention, communicating more deeply, and providing feedback and clarification; Kahn, 1990). These investments, in turn, allow individuals to protect, and ensure future access to, the comprehensive pool of resources these relationships provide. Consistent with the high-quality connections lens, multiplex workplace friendships provide access to the broadest scope of supportive interactions (Albrecht & Adelman, 1987; Dutton & Heaphy, 2003; Ibarra, 1993), including reliable and candid personal feedback, emotional support, career strategizing, and ongoing confirmation of each other's competence and potential (Kram & Isabella, 1985). As Baker, Cross, and Wooten (2003, p. 332) noted, individuals in these relationships are able to "learn and engage in the 'give and take' of a good conversation or problem-solving session" and ultimately "attended to and processed information more rapidly and more thoroughly, and retrieved ideas from memory and made connections to other ideas more quickly in a way that generated new insights."

We focus on multiplex workplace friendships with respect to network size and argue that these relationships will positively impact job performance. A large multiplex network—one with many contacts—implies that an individual is "in the thick of things" (Freeman, 1979), is better able to validate information that flows through their network (Baldwin et al., 1997), and will have greater opportunity to access resources that can compel effective work role performances (Kram & Isabella, 1985; Lin & Westcott, 1991; Mehra et al., 2001; Nahapiet & Ghoshal, 1998; Rook, 1984; Thoits, 1995). Individuals with a larger network of multiplex relationships have a variety of connections that allow them to think critically and gather diverse information in order to make better-informed decisions (Van Maanen & Schein, 1979). Moreover, the process through which solutions are generated is more efficient because "when you launch into a task with those you already know, you don't waste a lot of time figuring out what to expect from them or explaining what you mean every time you say something" (Casciaro & Lobo, 2005, p. 4). Finally, individuals who have contact with many others who function as both instrumental colleagues and friends will have more alternative sources of job-related information and will have more control over how they accomplish their work (Sparrowe, Liden, Wayne, & Kraimer, 2001; Zagenczyk & Murrell, 2009). In sum, a larger network of multiplex workplace friendships implies gaining access to more resources, having more diverse sources of information, and having greater control over task accomplishment, and because of these benefits, job performance will be enhanced.

Hypothesis 1: Multiplex workplace friendship network size has a positive relationship with performance.

Accounting for the Liabilities of Multiplex Workplace Friendships

Beyond gaining a clearer understanding of the relationship between multiplex workplace friendships and job performance, there have also been calls for work “where the theoretical motors are carefully distinguished and tested” to determine how these relationships function to influence individual and organizational effectiveness (Moran, 2005, p. 1145). Moreover, theoretical and practical research has emphasized positive features of multiplex workplace friendships; however, theoretically there are important yet largely untested counterproductive aspects (Bridge & Baxter, 1992). To this end, we integrate high-quality connections and conservation of resources theories to account for the effort and attention needed to manage multiplex workplace friendships. The multidimensional and intimate nature of these relationships makes them susceptible to resource drain, which in turn makes it more difficult to marshal sufficient resources to fulfill work demands necessary for effective role performances.

In essence, we argue that multiplex workplace friendships increase emotional exhaustion, or the feeling that one lacks energy and that one’s resources are inadequate for coping with demands at hand (Cordes & Dougherty, 1993; Maslach, 1982; Maslach & Jackson, 1981; Wright & Cropanzano, 1998). Multiplex relationships foster exhaustion because a large number of direct connections drain an individual’s resources—more relationships create greater role demands (Mayhew & Levinger, 1976). Individuals prioritize their multiplex workplace friendships; they care about their partner’s well-being (Thoits, 1995), and their strength makes them very difficult to neglect (Ingram & Zou, 2008). As a result, individuals signal their concern for their multiplex workplace friends’ needs by investing their time, energy, and attention to maintain and improve these high-quality social bonds. Yet, this investment requires constant effort and self-regulation, which depletes their resources (Martínez-Íñigo, Poirio, & Totterdell, 2013). As individuals invest in expressions of relational support, their existing resources are temporarily depleted (Baumeister, Bratslavsky, Muraven, & Tice, 1998). As such, individuals with many multiplex workplace friends are more susceptible to fatigue because they cannot give of themselves or be as responsible to their coworkers as they may have been in the past (Cordes & Dougherty, 1993), sapping energy that could otherwise be used to benefit performance directly (Bridge & Baxter, 1992; Thoits, 1995; Verbrugge, 1979).

Thus, we theorize that exhaustion is, in part, a mechanism through which multiplex workplace friendships *negatively* influence employee job performance. Multiplex workplace friendships are exhausting because they create feelings of responsibility and obligation, and because they

require investments of attention and energy toward their maintenance. Thus, although there are positive effects of multiplex workplace friendships on job performance, they should be offset somewhat by the effect of exhaustion, which reflects reduced energy and attention that could otherwise be applied to core job performance-related activities (Greenhaus & Beutell, 1985; LePine, Podsakoff, & LePine, 2005).

Hypothesis 2a: Multiplex workplace friendship network size has a positive relationship with exhaustion.

Hypothesis 2b: Multiplex workplace friendship network size has a negative indirect relationship with performance through exhaustion.

Positive Affect as Replenishment

Because multiplex relationships tend to be more secure, enduring, supportive, and influential than other relationships (Stohl, 1984; Verbrugge, 1979), they engender a sense of respect, warmth, and personal regard, each of which is associated with positive emotional states (Kahn, 1990; Mossholder, Settoon, & Henagan, 2005). Multiplex workplace friendships are “life giving” in that people in these relationships are likely to experience feelings of aliveness, vitality, positive arousal, and a sense of positive energy (Dutton & Heaphy, 2003; Quinn & Dutton, 2005). Further, a large multiplex workplace friendship network signals a positive work environment. Specifically, the instrumental aspect of these relationships has a stabilizing force that grounds the friendship in a work function and elicits a positive affective response toward work (Casciaro & Lobo, 2011). It signals cooperation rather than competition (Lazega & Pattison, 1999) and can produce a “virtuous circle in which everyone is more open to new ideas, more willing to help, and more trusting than would typically be the case” (Casciaro & Lobo, 2005, p. 4). In short, the energizing quality of multiplex relationships enhances positive affect, which refers to one’s level of pleasurable engagement with the work environment and is characterized by feelings of enthusiasm, energy, and determination (Russell, 1980; Watson, 1988). We propose that this positive affect contributes to job performance because it is reenergizing.

Consistent with conservation of resources theory, positive affect resulting from multiplex workplace friendships reflects feelings of physical strength, emotional energy, and cognitive liveliness (Hobfoll & Shirom, 2000), which should reduce feelings of exhaustion. Specifically, these positive feelings increase individuals’ motivation to obtain, retain, and protect the resources that they value, as well as influence the appraisal of their available coping resources (Lazarus, 1999; Shirom, 2004). As a

result, individuals will be less likely to feel they have insufficient resources characterized by exhaustion. To the extent that positive affect restores resources in the manner we described, it should also explain, in part, how multiplex workplace friendships and job performance are related: Multiplex workplace friendship and job performance have a positive relationship, in part, because they result in positive affect that is energizing and reduces feelings of exhaustion.

Hypothesis 3: Multiplex workplace friendship network size has a positive relationship with positive affect.

Hypothesis 4: Multiplex workplace friendship network size has a positive indirect relationship with performance through positive affect and, in turn, exhaustion.

Study 1 Method

Participants and Procedure

Participants were employees and their supervisors from one office of large insurance company located in the southeastern United States. The jobs in this organization have a fluid structure, making it possible for employees to shift positions horizontally within the organization on a temporary basis to get to know each other and work together. Moreover, the company actively encourages employees to participate in offsite events that promote friendships with coworkers both within and across departments. For example, the company sponsors an annual group volunteer service for associates that spans programs that fight hunger and incentivize health improvements to volunteering at Children's Hospital events. In combination, these efforts set the stage for the development of multiplex workplace friendships, as well as relationships that are exclusively focused on instrumental exchanges and pure friendship.

To solicit participation, the organization's human resources (HR) department sent an email to 368 employees with information regarding our study and how to participate. The email emphasized that participation was completely voluntary and that responses would be kept confidential by the researchers, who were not employed by the insurance company. The email instructed interested employees to click on a link that directed them to the electronic survey, which assessed demographics and items relevant to the study constructs. The HR department followed up with employees 2 weeks later to encourage nonrespondents to participate.

Three hundred and one employees completed the survey (81.8% response rate). Women comprised 83.9% of the sample, and 56.5% of respondents were married. On average, respondents worked 38.9 hours per week and performed a variety of jobs, including customer service, claims

representative, commercial underwriter, quality assurance, and claims adjuster. Four weeks after the deadline for completion of the employee survey, we contacted participants' supervisors and requested they provide ratings of their employees' job performance. Fifty-seven supervisors provided usable data on 168 employees who completed questionnaires. Therefore, on average, each supervisor rated approximately three employees ($SD = 2.30$). In exchange for their participation, employees were given \$5 and supervisors were given an engraved pen.

Measures

Network relationships. As per convention in the field of social networks (Burt, 1984, 1992; Ibarra, 1992; Moran, 2005), we used a name generation technique to derive the composition of respondents' personal networks.¹ Scholars have suggested the need to consider formal work interactions and informal friendships (Mehra et al., 2001), so we assessed these relationships to control for their effects on the endogenous variables. We first asked respondents to identify instrumental relations by having them list the full names of up to 10 coworkers who "you go to for assistance when having to manage various job challenges." Paralleling previous work (Ibarra, 1992; Mehra et al., 2001; Sasovova, Mehra, Borgatti, & Schippers, 2010), we then asked respondents to list the full names of up to 10 coworkers who "you consider yourself to be friends with (i.e., someone who you occasionally socialize with outside of work)." We used this raw data to calculate out-degree network size—the number of ties an individual directs at others (Hanneman & Riddle, 2005). We isolated multiplex workplace friendships by counting overlapping ties (individuals who respondents listed in *both* their instrumental and their friendship networks; Grosser, Lopez-Kidwell, & Labianca, 2010; Ingram & Roberts, 2000). For pure instrumental and pure friendship relationships, we counted the number of coworkers the focal participant listed as being an actor in each network who remained after removing those individuals who were included in the multiplex network.

Emotional exhaustion. We measured the exhaustion component of burnout using Maslach, Jackson, and Leiter's (1996) 5-item scale. Respondents rated, on a scale ranging from 1 = *never* to 7 = *every day*, how often they experienced each statement. Items included, "I feel emotionally drained from my work," and "I feel burned out from my work."

¹ Although we did not limit reports to peers in the survey instructions, we expect that peer-to-peer relationships involve different dynamics compared to peer-to-supervisor relationships. Given our study focus, we consulted the organizational chart during the data refinement process, and eliminated any responses that were not explicitly peer-to-peer in terms of comparable hierarchical level.

Work positive affect. We measured work-related positive affect using Watson, Clark, and Tellegen's (1988) 10-item scale. Respondents indicated how they felt "when you are at work or thinking about work" during the past year using a scale ranging from 1 = *very slightly or not at all* to 5 = *extremely*. Items included "excited," "active," and "proud." Preliminary factor analyses using data from respondents without matched supervisor reports indicated unacceptably low loadings for two items ("enthusiastic" and "interested"). The same issue was present in the matched data, and accordingly, these two items were excluded from the primary analyses.

Task performance. We measured task performance using supervisor ratings of five items from Williams and Anderson's (1991) measure, rated on a scale from 1 = *strongly disagree* to 7 = *strongly agree*. This measure taps task-focused contributions (e.g., "Adequately completes assigned duties") because this element of performance is most central to evaluations of employee effectiveness of the employees in our sample (Rotundo & Sackett, 2002).

Controls. We controlled for *pure instrumental network size* and *pure friendship network size* because these variables likely have independent influences on the extent to which employees form multiplex relationships (e.g., having a purely instrumental relationship at work can broaden in scope to become a friendship) and task performance. We also controlled for *employee gender* because prior research suggests women and men differ in their composition of friendship and instrumental networks (Ibarra, 1993), and the level of *work demands* because it could impact both network size and job performance. Consistent with prior research, we assessed work demands with six items that tap the degree to which employees perceive that their jobs include demands, such as time pressure, workload, and responsibility (LePine et al., 2005; Podsakoff, 2007). Examples of items include "My job requires that I complete a lot of work," and "I have a lot of assignments to complete on my job," and were rated on a scale from 1 = *strongly disagree* to 7 = *strongly agree*.

Analyses

We found a statistically significant supervisor effect on performance ($ICC1 = .32$ ($\chi^2 [56] = 131.25, p < .01$)),² indicating that the necessary

²We assessed the possibility that there was a supervisor effect by estimating a random coefficient model using hierarchical linear modeling (HLM 6.06; Raudenbush, Bryk, & Congdon, 2000). This model produces variance estimates for the between- and within-supervisor components of performance ratings, which we used to calculate the respective intraclass correlation (ICC1). ICC1s that are calculated from random coefficient models range from 0 to 1 and, when used to assess independence, are interpreted as the proportion of total variance that can be attributed to group membership (Bliese, 2000).

assumption of data independence for ordinary least squares regression is violated. The nonindependent nature of the data implies supervisor-level differences in ratings of performance need to be modeled. Accordingly, we tested the hypotheses using multilevel structural equation modeling (MSEM; Mplus 6.0; Muthén & Muthén, 2010), which utilizes maximum likelihood parameter estimates with standard errors and chi-square test statistics that are robust to nonnormality and nonindependence of observations.

Results

Construct Validity

We examined the validity of our measures by performing a confirmatory factor analysis (CFA). We estimated a four-factor model with indicators for work demands, positive affect, exhaustion, and task performance loading on their respective higher-order factors. The results provide four useful pieces of information. First, factor loadings for all latent constructs are significant (all p -values $< .01$), ranging from .62 to .97. Second, average variance extracted (AVE; average of the squared standardized item factor loadings) values for all latent constructs are greater than Fornell and Larcker's (1981) suggested cutoff of .50, indicating the item-level convergent validity of our constructs is acceptable. Third, AVE values for each pair of latent constructs exceeded the squared construct intercorrelation for that pair, indicating the measures have adequate discriminant validity (Fornell & Larcker, 1981). Finally, although the chi-square value is significant ($\chi^2(179, N = 167) = 294.436, p < .01$), goodness-of-fit indices (comparative fit index (CFI) = .95; root mean square error of approximation (RMSEA) = .06; standardized root mean square residual (SRMR) = .06) meet or exceed acceptable cutoff levels recommended by Hu and Bentler (1999). We also find the hypothesized four-factor model fits the data significantly better than (a) a CFA where the items of all constructs are loaded on a single factor ($\Delta\chi^2 = 961.714, \Delta df = 5, p < .01$; CFI = .69; RMSEA = .16; SRMR = .13); and (b) a three-factor CFA where all positive affect and exhaustion items are loaded on a single factor, and work demands and performance items are loaded on their respective factors ($\Delta\chi^2 = 488.848, \Delta df = 3, p < .01$; CFI = .88; RMSEA = .10; SRMR = .10). Overall, these results provide support for the validity of our measures.

The means, standard deviations, and zero-order correlations for the variables in this study are presented in Table 1. Reliability coefficients appear in the diagonal. Consistent with our hypotheses, multiplex workplace friendship ($r = .24, p < .01$) is positively related to performance, positive affect ($r = .27, p < .01$), and exhaustion ($r = .22, p < .01$).

TABLE 1
*Means, Standard Deviations, Reliabilities, and Intercorrelations Between
 Study 1 Variables*

Variables	Mean	SD	1	2	3	4	5	6	7	8
1. Gender	0.84	0.37	–							
2. Work demands	3.88	0.66	-.17*	(.89)						
3. Instrumental network size	3.61	2.82	-.11	-.04	–					
4. Friendship network size	5.27	3.44	-.08	-.04	.34**	–				
5. Multiplex network size	2.61	2.39	-.05	.11	.09	-.06	–			
6. Positive affect	3.34	0.85	-.13	.14	.11	.08	.27**	(.91)		
7. Emotional exhaustion	4.40	1.40	.03	.12	-.08	.04	.22**	-.34**	(.86)	
8. Task performance	5.67	1.13	.12	-.01	.15*	-.19**	.24**	.24**	-.23**	(.88)

Note. $n = 168$. Internal consistency reliabilities are reported on the diagonal. For gender: male = 0, female = 1.

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

To more directly test our hypotheses, we analyzed a series of structural models.

Tests of Hypothesized Relationships

For our proposed model, each multiple-item construct was modeled as a latent variable with the measurement scale set by fixing the variance to 1.0. Consistent with contemporary recommendations regarding tests of mediation (MacKinnon, 2008), we analyzed multiple models. First, we estimated a model where the effects of multiplex workplace friendship network size on task performance are fully mediated, with direct paths from (a) multiplex network size to positive affect, (b) multiplex network size to exhaustion, (c) positive affect to exhaustion, (d) exhaustion to task performance, (e) the control variables to the mediators, and (f) the control variables to task performance. This model fits the data well ($\chi^2 = 407.015$, $df = 273$, $p < .01$; CFI = .94; SRMR = .07; RMSEA = .05; Hu & Bentler, 1999). Second, to examine potential partially mediated effects, we estimated a model that also includes a direct path from multiplex workplace friendship network size to task performance. The results of this model indicate that the (a) partial mediation model fits the data better than the complete mediation model ($\Delta\chi^2 [1] = 10.18$, $p < .01$; CFI = .95; SRMR = .06; RMSEA = .05) and (b) direct effect parameter estimate is

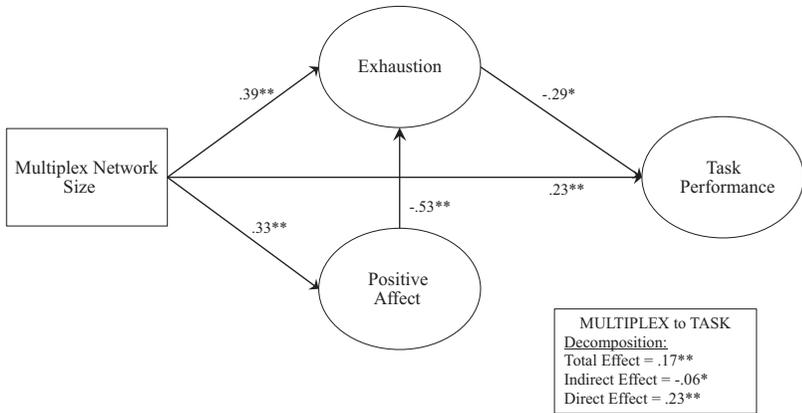


Figure 1: Results of Hypothesized Multilevel Structural Equation Model of Multiplex Network Size on Task Performance (Study 1).

Note. We tested a fully latent model that contains both a measurement model that represents observed variables as indicators of underlying latent factors and a path model of structural components. However, for simplicity, only the estimates for the highest order (latent) factors are included in Figure 1. Relationships between the control variables (pure instrumental network size, pure friendship network size, gender, and work demands) and all endogenous variables (positive affect, exhaustion, and task performance) were estimated but not reported in Figure 1. Pure instrumental network size ($\gamma = .17, p < .05$) and pure friendship network size ($\gamma = -.20, p < .05$) were significantly associated with task performance.
* $p < .05$; ** $p < .01$.

significant ($\gamma = .23, p < .01$). We retained this as our final model and report the results in Figure 1.

Tests of direct effects. Hypothesis 1 predicts that multiplex workplace friendship network size has a positive relationship with task performance. As shown in Figure 1, which depicts the final model with direct effects and significance levels, this hypothesis is supported ($\gamma = .23, p < .01$). Employees who report a greater incidence of relationships with overlapping instrumental and friendship content receive higher performance evaluations from their supervisors.

Hypothesis 2a predicts a positive relationship between multiplex workplace friendship network size and exhaustion.³ The results reported in

³Theoretically, we expected that exhaustion—conceptualized as the key dimension of burnout (e.g., Cordes & Dougherty, 1993; Shirom, 1989)—would be the main driver of our proposed relationships. However, burnout is a multidimensional construct that comprises of exhaustion, depersonalization, and diminished personal accomplishment. In order to test the relevance of the other burnout dimensions, we conducted a supplemental analysis in which we estimated a model including all three dimensions of burnout, along with paths from positive affect to each dimension. The fit indices for this model are worse than the

Figure 1 support this hypothesis in that multiplex network size has a positive relationship with exhaustion ($\gamma = .39, p < .01$). In short, exhaustion is higher for employees who have more coworkers who provide both instrumental and emotional support. We also found a positive relationship between multiplex workplace friendship network size and positive affect ($\gamma = .33, p < .01$). In other words, employees report higher levels of positive affect when they have more coworkers who they go to for work-related support and who are also their friends. These findings provide support for Hypothesis 3.

Tests of indirect effects. Figure 1 also depicts the indirect effects between multiplex workplace friendship network size and task performance. Consistent with the recommendations by MacKinnon (2008), we tested mediation by examining the significance of the indirect effect of multiplex network size on task performance through each of the potential mediators (positive affect and exhaustion). We calculated the indirect effects as the product of coefficients for each relationship by multiplying the direct effects. Mplus calculates the statistical significance of indirect and total effects using the delta method (Bishop, Fienberg, & Holland, 1975), which estimates the variance of a nonlinear combination of parameter estimates (Bollen & Stine, 1990).⁴ As indicated in Figure 1, the overall indirect effect of multiplex network size on performance is negative and significant (standardized parameter estimate = $-.06, p < .05$), and a decomposition of these effects illuminates indirect relationships that are consistent with our theorizing. First, consistent with Hypothesis 2b, multiplex network size has a negative, indirect effect on task performance through exhaustion (standardized parameter estimate = $-.11, p < .05$). Second, consistent with Hypothesis 4, multiplex network size has a positive, indirect effect on task performance through a pathway from positive affect to exhaustion (standardized parameter estimate = $.05, p < .05$).⁵

model including only exhaustion ($\chi^2(598, N = 168) = 990.476, p < .01$ CFI = .89; RMSEA = .06; SRMR = .08). Although positive affect is negatively and significantly related to all three burnout dimensions (exhaustion $\gamma = -.47, p < .01$; diminished personal accomplishment $\gamma = -.37, p < .01$; depersonalization $\gamma = -.29, p < .01$), only exhaustion displays a significant direct association with performance ($\gamma = -.28, p < .01$), an indirect association with performance (standardized parameter estimate = $-.11, p < .01$) and marginally significant indirect association from positive affect to exhaustion to performance (standardized parameter estimate = $.04, p < .10$). The indirect effects for the two other burnout dimensions and performance were nonsignificant, as were the indirect effects involving the additional dimensions and positive affect (all p values $> .10$).

⁴See Bollen (1989, p. 390–391) for a detailed description and illustration of the delta method estimation procedure.

⁵We also tested a model that estimated the direct path between positive affect and task performance. This parameter was found to be nonsignificant ($p > .05$), as was the difference in chi-square ($\Delta\chi^2(1, N = 168) = .39, p < .05$) between this model and the final model reported in Figure 1. Further, consistent with the perspective that social support functions

Discussion of Study 1

The results of Study 1 indicate that (a) multiplex workplace friendship network size has significant direct, indirect, and total effects on task performance and (b) this variable's indirect effect on task performance functions through the opposing mechanisms of employee positive affect (positive) and exhaustion (negative). Theoretically, these results suggest that, because of the significant degree of interpersonal engagement and energy investment involved, multiplexity has both an *amplifying quality* in which it is largely functional for performance because it provides access to support resources that have a built-in convergence between task and social spheres, as well as an *interfering quality* in which it has offsetting dysfunctional effects because it alone involves social processes with a built in tension.

Nevertheless, this study has limitations. First, we measured out-degree centrality, which again captures the number of coworkers the focal respondent lists as fulfilling a specific relationship. Although previous research has relied heavily on studies using out-degree centrality (e.g., Barsness, Diekman, & Seidel, 2005; Mehra et al., 2001; Moran, 2005; Rook, 1984; Terhell, van Groenou, & van Tilburg, 2007), and individuals tend to be reliable judges of the true pattern of relationships (Killworth & Bernard, 1976; Kumbasar, Romney, & Batchelder, 1994), it suffers from two potential biases that may have affected our results. The first relates to participants' ability to recall the existence of relationships because recall is biased by prior patterns of behavior (Freeman, Romney, & Freeman, 1987). The second bias involves the motivation of participants to inflate their status, such that individuals tend to perceive themselves as more central in the network than others perceive them (Kumbasar et al., 1994). With these biases in mind, we believe it is necessary to examine our hypotheses with more reliable measures.

Second, although we found support for our explanation of the relationship between multiplexity and task performance, we focused on broad explanatory mechanisms rather than the more narrow factors alluded to in our theorizing. For instance, although we theorized that the negative indirect effect of multiplexity in workplace friendships is due to maintenance difficulty, we measured exhaustion, which we believed would manifest

as a buffer between exhaustion and work outcomes (Cohen & Wills, 1985), we tested alternative models in which we explored the moderating effect of (a) multiplex workplace friendships and (b) positive affect on the relationship between exhaustion and performance. Neither of the parameter estimates for the interaction terms was significant (multiplex ties \times emotional exhaustion, standardized parameter estimate = .07, $p > .10$; positive affect \times emotional exhaustion, standardized parameter estimate = .48, $p > .05$). Therefore, for the purposes of parsimony, we excluded these paths from our analyses.

from the difficulty. To gain greater insight into the effects of multiplex workplace friendships, we believe it worthwhile to include constructs that more precisely map onto our theory.

Third, there may be some inconsistency in the timeframe of the measures. Whereas some reference a range of current experiences (network relationships, exhaustion), the time frame for others is more equivocal (positive affect). A stronger test of our theoretical arguments would involve greater consistency with regard to temporality in our measures. In Study 2, we employ methods that help us address these three limitations.

Theoretical Background and Hypotheses for Study 2

In Study 1 we found preliminary support for both an *interference* pathway—whereby time and attention dedicated to multiplex workplace friendships detracts from one’s available resources, eliciting a negative association with job performance—as well as an *amplifying* pathway—whereby positive emotions associated with multiplex workplace friendships regenerate personal resources, alleviating the effects of exhaustion and displaying a positive association with job performance. We take several steps forward in Study 2. First, whereas Study 1 focuses on mediators tied to individual experiences and emotions associated with one’s multiplex network, Study 2 considers mediators that refer to experiences with and support from coworkers more generally. Specifically, we suggest that the positive emotions associated with multiplex workplace friendships (Study 1) may produce a broadening effect that influences perceptions of others in one’s larger network. We ground this idea in Fredrickson’s (2001) broaden and build theory, which suggests that positive emotions individuals’ experience broaden their awareness and scope of attention to other social relationships, thus influencing appraisals of others in general. This broadened mindset fosters action tendencies that collectively build a person’s intellectual and social resources.

Second, continuing the integration of COR and high-quality connections theories, in Study 2 we test a model that includes an explicit investigation of the duality and tensions between friend and coworker roles by probing into the underlying mechanisms that are directly implied in our theory. Specifically, multiplex workplace friendships may produce incompatible demands that manifest in simultaneous positive and negative experiences (Bridges & Baxter, 1992). On one hand, individuals with these high-quality connections gain *emotional support* benefits and are more likely to develop a sense of *trust*, both of which increase one’s resources. Study 1 examined these amplifying mechanisms via positive affect, a much more general proxy concept. On the other hand, it requires

effort to maintain both the friendship and work sides of the relationship, and these connections are accompanied by “cultural prescriptions that entail *felt obligations* and responsibilities for the parties” (Bridge & Baxter, 1992, p. 202, emphasis added). Study 1 accounted for these interfering mechanisms with the broader exhaustion concept. By considering the narrower and more specific mechanisms, we not only test our theoretical ideas much more concretely, but we gain insight into a more comprehensive array of mechanisms responsible for transmitting the effects. In our view, this level of theoretical fidelity will be helpful in illuminating insights that will serve as a basis for future theory and research. Next, we describe each of these specific mechanisms in more detail and construct associations between multiplex workplace friendships and job performance through these countervailing pathways.

Emotional Support

Emotional support involves the provision of resources, such as attachment, compassion, and relying on and confiding in someone that is not related to work tasks (Ibarra, 1993; Lazega & Pattison, 1999). Because multiplex workplace friendships are founded on consideration, empathy, and goodwill (Ibarra, 1993), they provide an outlet for individuals to disclose and manage emotions. Multiplex workplace friendships provide unique support because coworkers share similar experiences or perceive similar work demands or hassles, so the support is tailored to the situation. Further, when seeking emotional support, it is useful for individuals to check for fallacies in their thinking through social verification (Bandura, 2001). For instance, if an employee experiences a distressing situation, such as unfair treatment by an employer, he may first want to validate that he is interpreting the event accurately by conferring with a dependable coworker. Thus, we predict individuals with larger networks of multiplex relationships have access to a large quantity and variety of emotional support resources.

Further, we expect individuals with larger multiplex workplace friendship networks will perform effectively because emotional support provides a mechanism to minimize distress (Lazarus & Folkman, 1984). Emotional support is a form of support that is not related to work tasks themselves; rather, it is a “backstage resource” that allows employees to indirectly manage their work demands (Lazega & Pattison, 1999). More specifically, rather than being a source of work-related communication, emotional support comprises communication regarding good things at work, bad things at work, and nonwork topics (Beehr, Jex, Stacy, & Murray, 2000), and having access to an outlet that allows the discussion of nonwork-related

topics and concerns fulfills socioemotional needs (Cobb, 1976; Cohen & Wills, 1985). Thus, emotional distress can be effectively managed with emotional support, decreasing the saliency of emotional distractions and, ultimately, allowing employees the opportunity to address work tasks. Along these lines, both AbuAIRub (2004) and Beehr et al. (2000) found a positive association between emotional support and job performance. Taken together, we theorize that access to emotional support will decrease attention paid to emotional distractions and increase productive work time, which will positively impact job performance.

Hypothesis 5: Multiplex workplace friendship network size has a positive relationship with coworker emotional support.

Hypothesis 6: Multiplex workplace friendship network size has a positive indirect relationship with performance through emotional support.

Trust

Trust refers to willingness to be vulnerable to another party with the expectation that the other party will behave in the focal individual's best interest (Mayer, Davis, & Schoorman, 1995). Multiplex relationships engender a strong emotional bond between individuals (Stohl, 1984; Verbrugge, 1979) and thus provide an outlet to disclose "central ambivalences and personal dilemmas" (Kram & Isabella, 1985, p. 121). Through repeated social interaction, greater shared experiences, and gradual expansion of the relationship to incorporate additional components, individuals develop more trusting relationships (Leana & Van Buren, 1999; McEvily, Perrone, & Zaheer, 2003; Oh, Chung, & Labianca, 2004). Further, multiplexity inspires greater trust through reciprocated behaviors that combine the formal respect for a coworker with the benevolent concern for a friend, such as looking out for one another and being forthright in interactions (Ingram & Zou, 2008; Mayer et al., 1995; McAllister, 1995).

Moreover, there is evidence that trust is linked to job performance (Colquitt, Scott, & LePine, 2007). One explanation is that when trust exists in a relationship, individuals are willing to engage in positive, cooperative activity (Fukuyama, 1995; Putnam, 1993). When people trust each other, they are more willing to share their resources without worrying that the other party will take advantage of them. Consequently, cooperative behavior will emerge, increasing individuals' access to valuable resources. A second explanation stems from *lack* of trust in a relationship. When a relationship is characterized by lack of trust, resources must be dedicated to monitoring and defensive behaviors (McAllister, 1995). Monitoring refers to observing an unreliable person with the intention of controlling their behavior. Defensive behaviors are intended to

prevent a task from being neglected because the person who was asked to perform the task is undependable. For example, an employee might make a request far in advance and from multiple people to ensure a task gets done. But, allocating resources to these behaviors leaves fewer remaining resources to accomplish work objectives (McAllister, 1995). This is aligned with Mayer and Gavin's (2005) assertion that when coworkers are untrustworthy, employees' cognitive resources will be preoccupied with nonproductive issues, including self-protection (Ashforth & Lee, 1990). Extending this argument, individuals who trust their coworkers do not need to expend resources that could otherwise be dedicated to performing work tasks. Thus, we expect larger networks of multiplex workplace friendships will be positively associated with job performance through trust.

Hypothesis 7: Multiplex workplace friendship network size has a positive relationship with coworker trust.

Hypothesis 8: Multiplex workplace friendship network size has a positive indirect relationship with performance through trust.

Maintenance Difficulty

Maintenance difficulty refers to challenges individuals experience in interpersonal relationships due to misunderstandings, incompatibility of goals, and the time and effort necessary to cope with disagreements (Winstead et al., 1995; Wright, 1984). Foremost, a "work friend" uniquely implies the integration of the private, discretionary, informal role of a friend with the more public, nondiscretionary, and formalized role of coworker (Hamilton, 2007). Given that these two roles often have competing expectations, norms, and goals (Halpern, 1996), multiplex workplace friendships may be especially depleting because they foster conflict regarding which role to prioritize (Granovetter, 1973; Hall & Richter, 1988; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Indeed, employees report feeling several contradictions between friendship and coworker roles. For example, being open and honest with friends can conflict with keeping important work matters confidential and giving friends special treatment can conflict with behaving impartially and treating all coworkers fairly (Bridge & Baxter, 1992).

In addition, maintenance difficulty in multiplex workplace friendships manifests from conflicts between the basic desire for belonging and maintaining a positive self-concept (Ingram & Zou, 2008). Ingram and Zou (2008) offer an example whereby an employee and a colleague have been on the same work team for a while and become close friends. However,

they were both up for a promotion, which the colleague is awarded. In this instance, it becomes difficult for the employee to manage internal conflict between believing he deserved the promotion and wanting to remain friends with his colleague. These authors conclude that the “co-existence of the affective-communal feature and the instrumental-exchange feature in a business friendship demands distinct or even conflicting strategies for relationship management” (p. 173). Taken together, it is difficult to maintain friendships with colleagues due to the incompatibility between friend and coworker roles and the time and effort dedicated to overcoming misunderstandings and disagreements (Winstead et al., 1995; Wright, 1984).

There are also theoretical reasons to believe that this effect will be transmitted to job performance. In an effort to minimize the difficulty of managing multiplex workplace friendships, individuals may spend more time resolving tensions or disagreements (Winstead et al., 1995), which diverts physical, cognitive, and emotional resources away from productive tasks. Thus, individuals experiencing maintenance difficulty are less able to perform their job effectively because their resources are inadequate to meet a full array of work demands, they are unable to prepare effectively, or they may withdraw (Cordes & Dougherty, 1993; Hobfoll, 1988; Maslach & Jackson, 1985; Wright & Cropanzano, 1998). Therefore, because efforts to cope with difficulties inherent in multiplex workplace friendships deplete available resources, we expect they will have a negative association with job performance through maintenance difficulty.

Hypothesis 9: Multiplex workplace friendship network size has a positive relationship with maintenance difficulty.

Hypothesis 10: Multiplex workplace friendship network size has a negative indirect relationship with performance through maintenance difficulty.

Felt Obligation

Finally, we theorize that multiplex workplace friendships are associated with *felt obligation*, which refers to the degree to which individuals hold psychological feelings of indebtedness toward coworkers (Mossholder et al., 2005). Consistent with the norm of reciprocity (Gouldner, 1960) and social exchange theory (Blau, 1964), gestures of goodwill tend to be reciprocated. Although social exchange theorists suggest that individuals select their social ties based on the likelihood that the costs outweigh the benefits (Homans, 1974; Thibaut & Kelly, 1959), there is little doubt that the simple act of receiving social benefits creates feelings of indebtedness and obligation (Mossholder et al., 2005). Moreover, an increase in help received increases the degree to which individuals

desire to reciprocate (Eisenberger, Cotterell, & Marvel, 1987). Because multiplex workplace friendships involve stronger relational ties with a coworker than do relationships that are based solely on the basis of work *or* friendship exchanges, there are more opportunities for an employee to exchange “social wares” (Mossholder et al., 2005), and thus, greater feeling of obligation should ensue (Bridge & Baxter, 1992). Often, stronger relationships create stronger feelings of obligation (Thoits, 1995).

We also expect that feelings of obligation will explain, in part, why multiplex workplace friendships influence job performance. Although individuals with a greater number of multiplex workplace friendships receive a broad range of resources, they become stretched (Hobfoll & Freedy, 1993) as they expend their own resources in attempts to maintain and restore balance with those to whom they feel obligated (Blau, 1964). Thus, feelings of obligation result in redirection of effort and behavior away from one’s assigned duties and toward those individuals who have previously provided assistance (Mossholder et al., 2005). In this way, we argue that, as feelings of obligation increase, individuals’ job performance decreases as they pay less attention to their personal tasks and, instead, dedicate their attention to others’ welfare (Bergeron, 2007).

Hypothesis 11: Multiplex workplace friendship network size has a positive relationship with felt obligation toward coworkers.

Hypothesis 12: Multiplex workplace friendship network size has a negative indirect relationship with performance through felt obligation.

Study 2 Methods

Participants

Our Study 2 sample consists of employees and supervisors who work in three retail stores and six restaurants. The organizations range in size from 7 to 49 employees and are located throughout the south-east U.S. The sample provides variation in contexts and the variables of interest. Importantly, the small size of the organizations allows us to employ a whole-network approach without risking participant fatigue, because we asked each respondent questions about each of his/her coworkers.

Managers circulated surveys to the employees, who returned them to the principal researcher in preaddressed, sealed envelopes. Employees were told that participation was voluntary and completely confidential. A total of 201 surveys were distributed, and 182 were returned (90.5%

response rate). Sixty-two percent of the respondents were women and 38% were men; 73% were Caucasian, 10% were African American, 10% were Hispanic, 2% were Asian, and the rest indicated “other” or did not specify their ethnicity. The mean age was 27.16 years ($SD = 5.47$), the mean tenure was 1.51 years ($SD = 1.28$), and 82% of the respondents had at least some college education. Four to 6 weeks after the employee surveys were returned, we requested that direct supervisors provide performance evaluations. A total of 43 supervisors provided performance ratings and, on average, supervisors rated 4.13 employees ($SD = 3.84$).

Measures

Network relationships. We used the roster method, a common technique to collect whole-network data that aids in recall and limits measurement error (Ferligoj & Hlebec, 1999; Holland & Leinhardt, 1973). Associates were presented with a list of all the employees at their store, and were asked to indicate whether they “know this person.” Respondents then answered questions regarding instrumental and friendship relations. We entered the raw data into the social network analysis software package UCINET 6.421 (Borgatti, Everett, & Freeman, 2002) to transform it into data that represent the presence or absence of a tie (i.e., one or zero, respectively; Hanneman & Riddle, 2005), optimizing the cut point, or threshold, to capture the nature of the relationship while minimizing loss of information (Thomas & Blitzstein, 2009).

To assess *pure instrumental network size*, respondents indicated how frequently they “go to this person for help, assistance, or information regarding work-related issues.” Responses were valued, and ranged from 0 = *not at all* to 5 = *very often*. To dichotomize, we used the cutoff value of “greater than 2,” such that we treated responses of 0 (not at all), 1 (very infrequently), and 2 (infrequently) as a “0” (no tie) and the values 3 (sometimes), 4 (often), and 5 (very often) as a “1” (a tie exists). Because instrumental ties are inherently asymmetrical (Krackhardt, 1990), we calculated out-degree centrality scores for each participant (Freeman, 1979), which represents the number of ties an individual directs at others (in this case, the number of coworkers the focal respondent indicates he or she goes to for work-related assistance).

To assess *pure friendship network size*, respondents indicated the extent to which they “are friends with this person, including seeing them socially outside of work, discussing personal issues with them, and being able to confide in them.” Responses ranged from 0 = *not a friend* to 5 = *best friend*. To dichotomize, we used the cutoff value of “greater than 1,” such that responses of 0 (not at friend) and 1 (acquaintance) were assigned “0” (no tie) and the values 2 (friend), 3 (close friend), 4 (very close friend),

and 5 (best friend) were assigned “1” (a tie exists). Because friendships are characterized by reciprocity, we only included ties in which both parties indicated the existence of a friendship by symmetrizing the data using the “minimum” function, which “characterizes the strength of the symmetric tie between A and B as being the weaker of the ties AB or BA” (Hanneman & Riddle, 2005). If the focal individual reported a friendship but the target did not (or vice versa), then we did not consider it a friendship tie in our analyses.

We created the *multiplex friendship network* by running the multiplex routine in UCINET (Grosser et al., 2010). A tie was considered multiplex only if an individual nominated a coworker as an instrumental connection *and* if they shared a reciprocated friendship tie. Because the organizations in our sample are different sizes, we normalized the centrality scores for each network by dividing each score by the total number of possible choices (i.e., the organization’s size) minus 1, which allows us to compare measures between different size networks (Hanneman & Riddle, 2005).

Other study measures. With the exception of task performance, all measures ranged on a scale from 1 = *strongly disagree* to 5 = *strongly agree*. We measured *emotional support* with a scale consisting of items from Schaefer, Coyne, and Lazarus’s (1981) and Mossholder et al.’s (2005) scales, and items we wrote for this study. We measured *trust* using four items from Mayer and Gavin’s (2005) scale. We adapted four items from Mossholder et al.’s (2005) measure of *felt obligation*. For *maintenance difficulty*, we used items from the maintenance difficulty scale of the Acquaintance Description Form (Wright, 1969), items from Rizzo, House, and Lirtzman’s (1970) role conflict scale, and items created specifically for this study. We measured *task performance* from supervisor reports in the same manner as in Study 1. All items are reported in the Appendix.

Controls. As in Study 1, we controlled for *pure friendship network size*, *pure instrumental network size* and *employee gender*. We also controlled for *tenure* and the personality traits *conscientiousness* and *extraversion* using Donnellan, Oswald, Baird, and Lucas’s (2006) scales. These factors may contribute to the extent to which people have the opportunity to develop and participate in the various networks, as well as their performance. Items for conscientiousness include, “get tasks done right away,” and “like order,” and items for extraversion include “talk to a lot of different people at parties,” and “keep in the background” (reverse coded).

Analyses

Because the employees worked in nine independent organizations, we assessed the possibility of an organization effect for the performance

outcome that we would need to take into account in our analyses (such that employees are likely to perform better or worse for reasons associated with their employing organization). We found a significant ICC1 for job performance ($ICC1 = .30$ ($\chi^2(8, N = 182) = 69.42, p < .01$), indicating an organization effect and the need to employ MSEM. We explored whether we needed to account for additional nesting due to supervisor effects; however, we did not find significant variance to account for at this level ($\chi^2(42, N = 182) = 51.96, p < .05$).

Results

Construct Validity

The results of a CFA including the items of all nonnetwork measures used in this study indicate that (a) all the factor loadings are significant (all p values $< .01$), ranging from .61 to .94; (b) AVE values for all constructs provide support for both convergent and discriminant validity of the measures; and (c) although the chi-square value is significant ($\chi^2(241, N = 182) = 440.966, p < .01$), several goodness-of-fit indices (CFI = .93; RMSEA = .07; SRMR = .07) meet or exceed acceptable cutoff levels recommended by Hu and Bentler (1999). In addition, the hypothesized five-factor model fits the data significantly better than (a) a single factor model ($\Delta\chi^2(10, N = 182) = 1970.893, p < .01$; CFI = .28; RMSEA = .22; SRMR = .20) or (b) a three-factor model in which the two positive mediators (trust and emotional support) and the two negative mediators (felt obligation and maintenance difficulty) each loaded on a single factor, and the performance items loaded on a separate factor ($\Delta\chi^2(7, N = 182) = 482.316, p < .01$; CFI = .78; RMSEA = .12; SRMR = .14). These results support the validity of the Study 2 measures.

Means, standard deviations, reliabilities, and zero-order correlations for the variables in this study are presented in Table 2. Consistent with our expectations, multiplex network size is positively related to performance ($r = .27, p < .01$), as well as emotional support ($r = .40, p < .01$), trust ($r = .42, p < .01$), felt obligation ($r = .17, p < .01$), and maintenance difficulty ($r = .26, p < .01$). To test our hypotheses directly, we analyzed a series of structural equation models.

Tests of Hypothesized Relationships

Each construct was modeled as a latent variable with the measurement scale set by fixing the variance to 1.0. Consistent with recommendations regarding tests of mediation (MacKinnon, 2008), we first estimated a model in which the effects of multiplex workplace friendship network size on task performance were fully mediated, with direct paths from

TABLE 2
Means, Standard Deviations, Reliabilities, and Intercorrelations Between Study 2 Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	0.62	0.49	–											
2. Tenure	18.29	15.36	.07	–										
3. Conscientiousness	3.87	0.90	.05	.08	(.84)									
4. Extraversion	3.52	0.74	.02	–.10	–.04	(.88)								
5. Instrumental network size	22.03	15.23	–.02	.02	.12	–.11	–							
6. Friendship network size	6.43	6.54	–.01	–.16*	–.10	.09	–.17*	–						
7. Multiplex network size	44.33	20.85	–.02	.32**	.12	.17*	–.22**	–.30**	–					
8. Emotional support	3.23	0.94	.11	.17*	.13	.28**	–.13	.27**	.40**	(.92)				
9. Trust	3.08	0.74	–.10	.11	.01	.12	–.03	.00	.42**	.28**	(.80)			
10. Felt obligation	1.97	0.69	.00	.10	–.11	.20**	–.16*	.16*	.17*	.38**	.31**	(.80)		
11. Maintenance difficulty	2.42	0.68	–.00	.18*	–.04	–.07	–.16*	–.02	.26**	.10	.05	.15*	(.92)	
12. Task performance	5.19	1.19	–.06	–.04	.18*	.13	.13	.02	.27**	.17*	.38**	.04	–.24**	(.93)

Note. $n = 182$. Internal consistency reliabilities are reported on the diagonal. For gender: male = 0, female = 1. Tenure reported in months. All network variables are standardized (ranging from 0 to 100) to control for different organization sizes.
* $p < .05$. ** $p < .01$.

(a) multiplex network size to each of the four mediators (emotional support, trust, maintenance difficulty, and felt obligation), (b) the four mediators to task performance, (c) the control variables to the four mediators, and (d) the control variables to task performance. This model fits the data fairly well ($\chi^2(590, N = 182) = 1006.581, p < .01$; CFI = .89; SRMR = .08; RMSEA = .07; Hu & Bentler, 1999). Second, to examine potential partially mediated effects, we also modeled a direct path from multiplex workplace friendship network size to task performance. Results indicate (a) the partial mediation model fits the data better than the complete mediation model ($\Delta\chi^2(1, N = 182) = 1.95, p < .01$; CFI = .90; SRMR = .08; RMSEA = .06) and (b) a significant direct effect parameter estimate ($\gamma = .24, p < .05$). We report results of this better fitting model in Figure 2.

Tests of direct effects. Figure 2 reports direct effects and significance levels. Providing additional support for Hypothesis 1, multiplex network size has a positive relationship with task performance ($\gamma = .24, p < .05$). These findings further suggest that employees who report a greater incidence of relationships with overlapping instrumental and friendship content receive higher performance evaluations. There are also significant positive relationships between multiplex network size and emotional support ($\gamma = .54, p < .01$), trust ($\gamma = .51, p < .01$), maintenance difficulty ($\gamma = .20, p < .01$), and felt obligation ($\gamma = .30, p < .01$), even when controlling for relationships with pure instrumental and friendship network size. In other words, and in support of Hypotheses 5, 7, 9, and 11, employees experience higher levels of emotional support and trust, as well as obligation and maintenance difficulty, when they have more coworkers who they go to for work-related support and who were also their friends.

Tests of indirect effects. Figure 2 also reports the indirect effects between multiplex network size and task performance, which are calculated using the same procedure as in Study 1. As indicated in Figure 2, the overall indirect effect of multiplex network size on performance is positive but nonsignificant (standardized parameter estimate = .14, $p > .05$). However, a decomposition of these effects indicates that this indirect relationship provides support for some hypotheses but not others. First, our results do not provide support for Hypothesis 6, such that the indirect effect from multiplex network size on task performance through emotional support is nonsignificant ($p > .05$). However, consistent with Hypothesis 8, our results indicate that multiplex network size has a positive, indirect effect on task performance through trust (standardized parameter estimate = .18, $p < .05$). Moreover, and consistent with Hypothesis 10, multiplex network size has a negative, indirect effect on task performance through

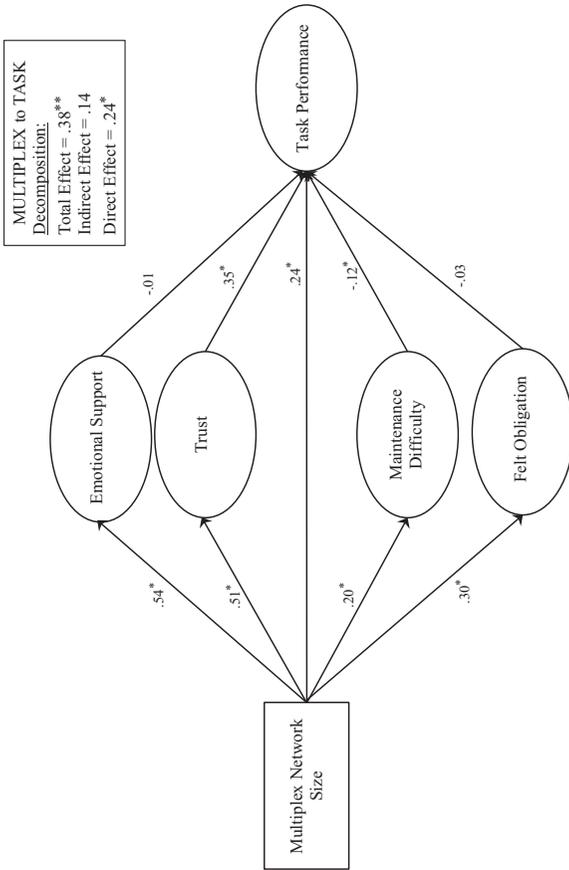


Figure 2: Results of Hypothesized Multilevel Structural Equation Model of Multiplex Network Size on Task Performance (Study 2).

Note. We tested a fully latent model that contains both a measurement model that represents observed variables as indicators of underlying latent factors and a path model of structural components. However, for simplicity, only the estimates for the highest order (latent) factors are included in Figure 2. Relationships between the control variables (pure instrumental network size, gender, tenure, conscientiousness, and extraversion) and all endogenous variables (the mediators and task performance) were estimated but not reported in Figure 1. Pure instrumental network size was significantly associated with task performance ($\gamma = .19, p < .05$), pure friendship network size was significantly associated with emotional support ($\gamma = .36, p < .05$), and felt obligation ($\gamma = .24, p < .05$), extraversion was significantly associated with emotional support ($\gamma = .24, p < .05$) and obligation ($\gamma = .21, p < .05$), and conscientiousness was significantly associated with emotional support ($\gamma = .20, p < .05$). We also ran a model with nonsignificant controls removed to relieve degrees of freedom ($\chi^2 = 600.274, df = 330, p < .01$; CFI = .92; SRMR = .09; RMSEA = .07), and the pattern of results was preserved. * $p < .05$; ** $p < .01$.

maintenance difficulty (standardized parameter estimate = $-.03$, $p < .05$). Hypothesis 12, however, is not supported in that there is not a significant indirect effect through felt obligation ($p > .05$).

General Discussion

The ubiquity of multiplex workplace friendships warrants a deeper investigation of their effects on individuals' performance at work. Indeed, McEvily and colleagues (2014) argue that "the more we attempt to disentangle formal [interaction] and informal [interaction] in an effort to understand their unique effects, the less we learn about how they actually operate" (p. 333) and call for investigations "where multiplexity of interactions is not just a possibility, but rather is an essential and defining feature" (p. 335) of theory and research. Here, we address this issue by exploring how and why multiplex workplace friendships uniquely influence performance.

Theoretical Implications

Informed by theory on high-quality connections, we argued that the coexistence of instrumentality and friendship within a single relationship produces a synergistic pool of resources that are richer and of greater utility than resources associated with relationships that are exclusively instrumental or friendship based. Because individuals in multiplex workplace friendships communicate more intimately by providing more detailed and accurate information, they afford a more complete and satisfying means to address performance demands. With our findings and this logic in mind, theories about the impact of social relationships on employee effectiveness should consider multifaceted workplace friendships and the unique mechanisms through which their impacts occur.

In this research, we took a major step forward in this regard. That is, we expanded the basic theoretical framing by integrating conservation of resources theory in order to offer a balanced perspective that accounts for potential detriments of multiplex workplace friendships. Indeed, they require maintenance of potentially incongruous and resource-intensive roles. Our results from both studies support this inimical pathway of multiplex workplace friendships. Although we are not the first to note there may be costs to maintaining friendships, our research identifies specific theoretical mechanisms through which these costs occur (i.e., exhaustion and maintenance difficulty), and we examine how these mechanisms transmit the effect of multiplex workplace friendships to job performance. At the very least, our research suggests it is necessary to specify models of social relationships that explicitly include costs to maintain them.

We also found that some positive effects may offset the costs of multiplex workplace friendships. In Study 1, positive affect associated with multiplex workplace friendships was negatively related to exhaustion, which at least partially reduces the effect on job performance. Indeed, multiplex workplace friendships satisfy needs to feel secure and involved in the workplace, resulting in experienced positive affect, which decreases feelings of exhaustion that otherwise would be detrimental to job performance. In Study 2, we found that multiplex workplace friendships uniquely functioned through trust to impact job performance, creating a counterbalance to the difficulty involved in maintaining them.

Taken together, our findings inform theory by describing how multiplex workplace friendships are more than the sum of their parts, because each relational aspect it comprises (i.e., instrumentality and friendship) “tends to reinforce the other, thus strengthening the overall tie” (Cotton, Shen, & Livne-Tarandach, 2011, p. 18). Indeed, not only do multiplex workplace friendships influence performance over and above purely instrumental or purely friendship-based relationships, but their functioning is distinct as well. Multiplex workplace friendships provide for *coping richness* that does not exist in relationships that are unitary, for example, by creating transactions of mutual influence (Eyres & MacElveen-Hoehn, 1983; Roberts, 2007). We theorize that this type of coping is especially influential in enhancing performance because, over time, the parties have access to the broadest scope of supportive interactions (Albrecht & Adelman, 1987; Ibarra, 1993) and they become mutually engaged and actively participative in a broad range of activities that directly or indirectly affect the well-being and effectiveness of the parties (Dutton & Heaphy, 2003).

Our investigation also implies a need to rethink the interpretation of previous research. A number of studies conclude purely instrumental relationships or friendships translate to higher levels of performance; however, many do not explicitly account for the possibility that individuals are members of both networks simultaneously (e.g., Baldwin et al., 1997; Chiaburu & Harrison, 2008; Jehn & Shah, 1997; Mehra et al., 2001; Roberts & O'Reilly, 1979). Indeed, Ingram and Zou (2008) explain that the norm is for researchers to “treat the friendship network in business contexts as a distinct system that functions separately from instrumental networks,” and they are rarely explicit about the “joint occurrence of affect and instrumentality in business relationships” (p. 178). Moreover, Ibarra (1993) explains that when asking individuals to identify who they perceive as their instrumental ties, researchers most often do not inquire whether these ties also serve an affective function. Similarly, when asking individuals to identify with whom they are friends, they do not also inquire whether that person serves an instrumental function. In this way,

effects of unitary ties are not truly isolated, and “causal inferences may be inaccurate because observed effects may actually be due to the expressive [instrumental] component of these relationships” (Ibarra, 1993, p. 60). Thus, because relationships tend to be multifaceted (Merton, 1976; Pratt, 2001), and because effects of these relationships are unique, conclusions drawn from this previous research regarding the performance effects of these relationships may be incomplete. Future theory and research on social networks should explicitly account for multidimensionality of relationships.

Practical Implications

In light of organizational policies that provide a conduit for coworkers to build relationships and become aware of each other’s values and interests—such as encouraging employees to share something personal at the start of a work meeting—there are practical implications related to this research to document and study. Our research can help managers understand when to leverage informal networks to respond to unanticipated problems and improve performance (Krackhardt & Hanson, 1993), and guide policies about whether to restrict fraternizing or foster relationship development (Gittell, Seidner, & Wimbush, 2010).

The importance of informal networks is based on observations that a great deal of work occurs outside formal organizational networks (e.g., Krackhardt & Hanson, 1993). Our findings take this conclusion one step further by demonstrating that the benefits of informal friendship networks are realized when they overlap with work-related networks. Employees appreciate the opportunity to interact informally with their coworkers (MacMillan, 2007), and when coworkers become friends, a greater sense of social integration and embeddedness is possible (Oh et al., 2004). This suggests that organizations should focus on practices that promote friendship among coworkers who can interact for work-related purposes. For example, the recent trend of managerially imposed games (i.e., gamification) can facilitate friendly competition that is directly related to the achievement of their task work (Mollick & Rothbard, 2013). Or, companies can implement computer-based social intranet systems that allow employees to simultaneously collaborate and share task information while getting to know each other on a social level (Ollier-Malaterre, Rothbard, & Berg, 2013).

Of course, multiplex workplace friendships have costs to be considered. However, managers can actively take steps to protect employees from deleterious effects of exhaustion and maintenance difficulty. Managers can use social network analysis to map the informal networks of their company (Cross & Parker, 2004; Krebs, 2007) and attempt to

distribute friendship across employees through the friendship-building practices suggested above. Alternatively, managers can help employees evaluate and diagnose their personal networks using established assessments (e.g., Higgins, 2004; Ibarra, 2002; Thomas, 2009). Research suggests that individuals are active agents (Nohria & Eccles, 1992) who have discretion over whether and how they adapt their discretionary networks (Ahuja, Soda, & Zaheer, 2012). Thus, they can map their personal networks and craft them to allow management of demands and difficulties. This could prevent a single employee from becoming the hub of an organization's multiplex workplace friendship network and, in turn, relieve feelings of overload caused by a large number of people relying on him or her. Yet, if it becomes clear that certain employees have larger multiplex workplace friendship networks and are at greater risk of exhaustion, managers can impose interventions geared toward improving coping and stress management skills.

Limitations and Future Research

Our research has several limitations that should be considered. First, we did not examine organizational factors that might influence the network variable effects. For example, having a lot of friends in an organization that does not support informal interactions or promote norms of openness and friendliness may undermine the development and maintenance of workplace relationships. Thus, perhaps perceptions that there is a positive climate for friendship would moderate the extent that multiplex workplace friendship network size debilitates job performance (Berman, West, & Richter, 2002). Although we controlled for organizational effects in Study 2, future research should explore potential boundary conditions of our work. Moreover, the relationship between multiplex workplace friendships and job performance is not fully mediated in either model (Study 1 or Study 2), suggesting that there are additional mechanisms worth studying. For example, multiplex workplace friendships may provide individuals with a greater sense of control over and access to information that could facilitate performance.

Second, we tested our hypotheses using cross-sectional data. Although social network theories imply that network structure causally precedes individual performance, it is possible there is a reciprocal relationship between network structure and job performance (Sparrowe et al., 2001). For instance, it is possible that employees seek coworkers who are high performers, contributing to the size of the high performer's instrumental network. We made an effort to address this possibility by collecting performance evaluations from supervisors at a later time period. However, our results should be interpreted with appropriate caution, and future

research should investigate the underlying temporal nature of network relationships and performance.

Finally, we measured multiplex workplace friendships using the conventional social networks approach (Kuwabara et al., 2010). Specifically, we asked participants two independent questions (whether their coworkers served instrumental functions and whether their coworkers were a friend), then applied a calculation procedure that allowed us to disentangle unitary from multiplex ties. We used this approach for a number of reasons. First, our review of the literature indicated that this approach is currently the only method used by authors examining ties with multiplex content from a social network perspective, so our approach is consistent with the precedent set by the literature on this topic (e.g., Grosser et al., 2010; Hayton et al., 2012; Ho & Levesque, 2005). Second, our approach allows us to examine the impact of an individual's network position and characteristics of their network on associated outcomes (Chen, Takeuchi, & Shum, 2013; Crawford & LePine, 2013).

However, we acknowledge there are a number of alternative measurement approaches we could have used to measure multiplex workplace friendships.⁶ Most notably, we could have used a direct measure with items asking respondents to indicate the degree to which relationships with coworkers are purely instrumental, purely friendship, and both instrumental and friendship. This approach would directly tap employee perceptions in a way that has face validity. However, we decided not to adopt this approach for a number of reasons. First, the items would necessarily be double-barreled insofar as the item for multiplex workplace friendships would have to refer to both expressive and instrumental relationships. Experts in the surveying and scale development literatures (e.g., Hinkin, 1995; MacKenzie, Podsakoff, & Podsakoff, 2011; Tourangeau, Rips, & Rasinski, 2000) typically warn against these types of items and instead recommend that double-barreled items be separated into individual statements, which is consistent with our approach. Second, direct assessments of multiplex workplace friendships, using questions such as, "I have both friendship and work-related relationships with this individual," would be susceptible to halo bias. Specifically, if a respondent has a strong instrumental relationship with a coworker (such that they work together frequently, interdependently, and in a positive manner), this general feeling may "color the judgments of the specific dimensions [of the relationship]" (Thorndike, 1920, p. 25). In other words, respondents generalize the positive nature of the relationship over multiple dimensions (i.e., "this person is really helpful, so I guess I would consider him a

⁶We thank an anonymous reviewer for sparking this engaging debate about various relationship measurement approaches.

friend”) and conclude that the relationship is multiplex. Finally, given that a direct measure of multiplexity would still require obtaining instrumental and friendship tie relationships separately to capture pure content as controls, we viewed our technique as more efficient and less likely to lead to participant fatigue.

Moreover, whereas we note potential confounding of instrumental and affective content in prior research using a social networks approach, researchers have adopted other approaches that may be less susceptible to this confounding. For example, some researchers have used an *averaged*, or compositional, approach by treating all coworkers uniformly, say, by asking a general question about the characteristics of their relationship with “coworkers.” Importantly, though, when contrasting the averaged approach with a social network approach, Crawford and LePine (2013) illuminate that the former “assume[s] isomorphism between manifestations of constructs,” necessarily constraining interaction across all coworkers as the same. A second alternative approach is the *relational*, or dyadic, approach, whereby individuals report about a relationship with a single, specific coworker (Chen, Takeuchi, & Shum, 2013). But, with respect to relational measures, investigating the impact of a single coworker does not account for the likelihood that employees rely on and are impacted by multiple coworkers (i.e., “relationship constellations”; Higgins & Kram, 2001; Kram, 1985). Therefore, although these alternative approaches have their merits, they too have their limitations. Future research could benefit from comparing these approaches to determine if they produce complementary or disparate effects.

Although future research could address the limitations mentioned above, our work also illuminates several additional questions. For example, although we examined the effects of social relationships among peers, the dynamics and complexities likely vary with respect to whether the target is a peer, supervisor, or subordinate. Whereas friendship with a peer may cause coworkers to view a focal individual as “too social” or “easily distracted,” a friendship with a boss may be viewed as a political strategy, leading to perceptions by coworkers of “brown nosing” and favoritism (Winter, 2012). Coworker perceptions likely have distinct effects on focal individuals and their work performance. Investigating this issue in future research could lead to more refined insights regarding relationships that exist among a wide range of organizational members.

Another interesting potential line of research is suggested in our choice of measures used in Study 2. Specifically, although our core predictor (i.e., multiplex workplace friendships) is at the individual level and refers to relationships with a specific subset of coworkers, our mediators (emotional support, trust, maintenance difficulty, and felt obligation) are broader in so far as they focus on coworkers more generally. Thus, perhaps benefits and

dilemmas that originate from multiplex ties can influence attitudes toward all coworkers, not only those within the specified network. Although we did not directly examine this spillover effect because it was beyond the scope of the paper, it is an interesting issue to pursue in future research. In particular, it would be worthwhile if future research elaborated on Fredrickson's (2001) broaden and build theory to identify the variables and processes responsible for the spillover effect of multiplexity from those specific relationships to others in one's constellation of network connections. Such research could provide the foundation for a theory of how multiplex relationships have synergistic effects on the quality of relations more generally.

We also focused on predicting task performance as a first step in establishing multiplex workplace friendships as a construct with significant theoretical and applied implications. Yet, future research could explore how these relationships are linked to discretionary employee outcomes. For instance, individuals with larger multiplex networks may display more voice (by communicating opinions about work issues to others in the organization; LePine & Van Dyne, 1998) because they trust that substantive action will be taken by the target to resolve the issue raised (Detert, Burris, Harrison, & Martin, 2013) or feel responsible to these individuals to guide the organization in positive direction. Importantly, recent theoretical work suggests that individuals may engage in discretionary behavior at the expense of task performance (Bergeron, 2007) and that individuals who engage in discretionary behavior may ultimately experience citizenship fatigue, which may similarly reduce performance (Bolino, Hsiung, Harvey, & LePine, 2015). Thus, if individuals with larger multiplex workplace friendship networks are positioned to provide a large degree of support and resources (e.g., many coworkers approach them for work-related advice), they may be seen as "good citizens" but overall poor performers.

When considering characteristics of work relationships, we focused on those that are positively valenced, such that coworkers interact to gain access to work-related information and friends interact for access to emotional support. In light of salient negative interactions in the workplace (Labianca & Brass, 2006), though, employees frequently interact with coworkers who they dislike, but with whom they have to work (Wellman, 1988). Similarly, individuals may have friends at work who withhold valuable work-related information from them or who are supportive but are not genuinely happy about their successes. This tension represents a pervasive, but largely understudied, state of ambivalence in workplace relationships. Whereby in these studies we considered multiplex workplace friendships that comprise overlapping positive content, friendships may also comprise both positive and negative contents (Methot &

LePine, 2014). Thus, future research should investigate effects of different multiplex relationships, such as friendship with competitors (Ingram & Roberts, 2000; Zou & Ingram, 2014).

Finally, researchers could explore the implications of individual differences that may influence the degree to which multiplex workplace friendships influence job performance. For example, research on role segmentation preferences suggests that people systematically vary in the degree to which they prefer to protect their work lives from their nonwork lives, and vice versa, and that these preferences have an important impact on a wide range of affective, cognitive, and behavioral consequences (Methot & LePine, forthcoming). Researchers could apply this concept to theorize that the relationship between multiplex workplace friendships and job performance would be lower for those individuals who have strong preferences for role segmentation and that this effect could be attributed to both a weaker indirect effect through the resource enriching pathways and a stronger indirect effect through the resource depleting pathways. Future research that explores this type of moderated mediation could illuminate a much more elaborated view of multiplex workplace friendships.

To conclude, workplace relationships that contain both friendship and instrumentality are prevalent in organizations and are of great concern to managers and scholars. We contribute to the dialogue on this topic by explicitly examining countervailing pathways through which they have their effects on job performance. Circling back to the question posed in the title of this article, our overall conclusion is that, although multiplex friendships are beneficial to employee job performance, they are somewhat of a mixed blessing. Given that friendships fulfill human needs and have functions that go beyond job performance, research and practice aimed at identifying and mitigating their adverse effects at work could be especially worthwhile to both employees and organizations.

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APPENDIX
Items for Study 2 Measures

Emotional support

1. My coworkers share related personal experiences as an alternative perspective to my problems.
2. My coworkers provide encouragement and emotional support.
3. My coworkers boost my spirits when I feel low.
4. My coworkers listen to me when I'm frustrated about something and need to vent.
5. My coworkers empathize with my concerns and feelings.

Trust

1. If I had my way, I wouldn't let my coworkers have any influence over issues that are important to me.
2. I would be comfortable giving my coworkers a task or problem that was critical to me, even if I could not monitor their actions.
3. I would tell my coworkers about mistakes I've made on the job, even if they could damage my reputation.
4. If my coworkers asked why a problem happened, I would speak freely even if I were partly to blame.

Felt obligation

1. I often feel preoccupied thinking about how much I owe my coworkers for their help.
2. I spend a lot of time considering how I will repay my coworkers after they help me.
3. Much of my attention while I am at work is spent thinking about something a coworker did for me.
4. I dedicate a significant amount of my energy to thinking about obligations I have to my coworkers.

Maintenance difficulty

1. I sometimes find it difficult to behave in a way that is appropriate for my job, but that pleases the friends that I work with.
2. It is difficult to maintain friendships with my coworkers.
3. I have to do things to please my friends at work but that should be done differently.
4. Working with friends makes me feel like there are incompatible expectations of me.
5. I sometimes have to break a rule in order to make a friend at work happy.
6. I do things that are apt to be accepted by one person at work and not accepted by others.

Task performance

1. Adequately completes assigned duties
 2. Fulfills responsibilities specified in his/her job description
 3. Performs tasks that are expected of him/her
 4. Meets formal performance requirements of the job
 5. Engages in activities that will directly affect his/her performance evaluations
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Note. All unstandardized factor loadings were significant at $p < .01$.