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Social connection in organizations: the effects of local ties on job engagement and performance

Conexão social nas organizações: efeitos dos laços locais no engajamento e no desempenho no trabalho

Conexión social en las organizaciones: efectos de los vínculos locales relativos al intra organizacionales y rendimiento en el trabajo

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Abstract

This study examines the effect of local ties of organizational actors on their degree of job engagement and performance. The study carried out a survey with 249 respondents and analyzed the effect of local ties (i.e., ties of the ego) through degrees of intra-organizational social connections. Engagement was measured in physical, cognitive, and emotional dimensions. Performance was represented by the degree of achievement in tasks. The results show that only cognitive engagement and performance are influenced by degrees of intra-organizational social connection. These results are explored in the conclusions of the article.

Keywords: Social connection; Engagement; Performance

Resumo

Neste artigo, teve-se como objetivo examinar o efeito dos laços locais dos atores organizacionais em seu grau de engajamento e desempenho no trabalho. O estudo foi realizado por meio de um *survey* com 249 respondentes. O efeito dos laços locais (i.e., laços do *ego*) foi analisado por meio do grau de conexão social intraorganizacional. O engajamento foi mensurado nas dimensões física, cognitiva e emocional. O desempenho foi representado pelo grau de consecução das tarefas. Os resultados apontam que apenas o engajamento cognitivo e o desempenho são influenciados pelo grau de conexão social intraorganizacional. Tais resultados são explorados nas conclusões do artigo.

Palavras-chave: Conexão social; Engajamento; Desempenho

Resumen

El objetivo del presente trabajo fue examinar el efecto de los vínculos locales de los actores organizacionales en su nivel de compromiso y rendimiento en el trabajo. El estudio fue realizado por medio de un *survey* con 249 encuestados. Se evaluó el efecto de los vínculos locales (o sea, vínculos del *ego*) por medio del grado de conexión social intraorganizacional. El compromiso fue medido en las dimensiones física, cognitiva

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y emocional, y el desempeño fue representado por el grado de cumplimiento de las tareas. Los resultados indican que sólo el compromiso cognitivo y el desempeño están influenciados por el grado de conexión social intraorganizacional. Se detallan estos resultados en las conclusiones del artículo.

Palabras clave: Conexión social; Compromiso; Rendimiento

Introduction

The search for a sense of cohesion is a key characteristic of the behavior of social actors (Friedkin, 2004; Kadushin, 2001). This meaning is constructed by connecting with other individuals or even anthropomorphized non-human elements (e.g., artifacts, religious agents) (Epley, Akalis, Waytz, & Cacioppo, 2008; Walton, Cohen, Cwir, & Spencer, 2012). The reasons for this search for connections are centered on the basic need for security and avoidance of isolation, loneliness, and anguish (Castano, 2013). Walton et al. (2012) claim that a sense of relating and belonging to a group considered familiar centrally represents the characteristics of that conceptualized in the field of psychology as a social connection. Kadushin (2001, 2012) points out that this need to belong to a collectivity creates a sense of safety that characterizes one of the main motivations for the formation and maintenance of social networks.

The main implication of this basic need of the individual when taking into account the organizational context is the creation of social norms of acceptance and inclusion. This kind of social norm is the positive expectations that a focal agent (ego) has in relation to their contacts (alters) in intra-organizational networks, with regards to their inclusion. The focal agent creates an expectation of their role in relation to other social actors of an organization in the sense that their contacts, especially their strong ties (with whom they have more frequent interaction) (Granovetter, 1973), behave in a manner that makes them feel included in an organization. Studies on expatriates are among the clearest examples of the negative effects generated by newcomers faced with co-workers who do not perform this social role—i.e., they do not act in a way that tries to make the new member feel part of the organization (Pruetipibultham, 2012; White, Absher, & Huggins, 2011; Yamazaki, 2010).

The expectation of being welcomed and accepted by colleagues, or even treated intimately like a member of a family (Balkundi & Harrison, 2006; Okhuysen, 2001), has effects on the behavior of organizational actors. Especially in Brazil where people are typically characterized as welcoming, typified in Sérgio Buarque de Holanda's *Cordial Man* (2008, p. 146), there is a continuous reconstruction of the expectation of being accepted by peers. It is particularly important, therefore, that the effects of this phenomenon are investigated in more detail. In this line of reasoning, the concept of intra-organizational social connection (Maciel, 2015; Maciel & Camargo, 2015) is employed in the present study. Intra-organizational social connection reveals to what extent a focal agent (ego) notices that their local ties (alters) behave in a way that makes them feel part of an organization. Thus, it is relevant to examine the influence of this perception on behavior at work.

To evaluate this type of relationship the following objective in this study was defined: Examine the effect of local ties of actors embedded in intra-organizational networks on engagement and performance at work. These dependent variables were chosen as they represent some of the key behaviors in formal and informal evaluations at work (Downing, 1994; Rich, Lepine, & Crawford, 2010). Engagement is treated as a construct composed of physical, cognitive, and emotional dimensions. These dimensions correspond to the degree to which a worker employs his or her physical strength, attention, and emotional energy in activities (Christian, Garza, & Slaughter, 2011; Kahn, 1990; Zhu, Avolio, & Walumbwa, 2009). Task performance refers to the degree to which an individual fulfills the obligations associated with a particular function (Ng & Feldman, 2009).

The main contribution of this work is that it goes beyond research that only emphasizes the effects of a job's nature (e.g., autonomy), dispositional variables, and sociodemographic variables in engagement and performance, and therefore examines the importance of relational resources in greater detail. Moreover, this study overcomes the limitations of strictly structuralist studies, which are almost invariably restricted to examining the influence of the structural characteristics of intra-organizational networks, such as centrality, reciprocity, and structural holes in behavioral variables (e.g., Perry-Smith, 2006; Raider & Krackhardt, 2001). Thus, it is possible to consider with greater care social actors' reflexivity in the performance of their local ties and examine the effects of this evaluation at work, since this phenomenon has been addressed only peripherally in previous research.

Intra-organizational social connection as a relational resource

This work presents the intra-organizational social connection construct as an alternative to traditional measurements of social network analysis (Hanneman & Riddle, 2011; Kadushin, 2012) or as a type of relational resource (Freeney & Fellenz, 2013; Grant, 2007). In classical structural analysis of social networks (Freeman, 1977) reflexivity of social actors is disregarded (Emirbayer, 1997; Emirbayer & Goodwin, 1994). The idea of evaluation and attribution of meaning by a network agent is totally ignored because behavior occurs directly in accordance with—for example, the number of incoming ties (in-degree centrality), outgoing ties (out-degree centrality), similarity in the pattern of ties (structural equivalence), or the proportion of non-redundant ties (structural roles). In such studies, the interpretation that a focal agent (ego) makes about their own centrality or any other property and action of their contacts (alters) is ignored, peripherally pointed to, or even assumed as bias (Brands, 2013).

In this sense, the notion of intra-organizational social connection makes it possible to consider the capacity for reflexivity of intra-organizational network agents, since each focal agent evaluates the behavior of their contacts from institutionalized norms that are associated with typified roles in the context of organizations. More specifically, defining intra-organizational social connection as a generalized perception where contacts—who the focal agent ranks as targets of more frequent interactions (i.e., strong ties) (Granovetter, 1973)—behave in a way that contribute to the construction of meaning that they belong to, which in turn is connected to a set of relationships of a particular socially integrated group. The construct shows to what extent contacts (alters) make the ego feel: (i) that they belong to the organization; (ii) that they are connected to an intra-organizational network; (iii) that they are part of a cohesive group; and (iv) that they form part of a group which could be regarded family (Maciel, 2015). It is important to stress that even when the construct is a generalized expectation in terms of the basic needs of any individual, the intensity of this expectation can vary depending on specific norms of reciprocity in each cultural context (e.g., Brazil) (Holanda, 2008), sociodemographic attributes, dispositional orientations, different processes of organizational socialization, hierarchical position, and type of work in organizations.

Considered a relational resource (Grant, 2007), intra-organizational social connection can be framed in a broader set of company assets that facilitate the allocation of energy at work and contribute to productivity (e.g., organizational support, confidence, and sense of reciprocity). According to Freeney and Fellenz (2013), relational approaches (i.e., those that emphasize the role of social resources in the execution of tasks) may indicate the type of relationship they operate as antecedents to the degree of effort applied to work. Grant (2007) reinforces this reasoning when he calls attention to "work's relational architecture" (p. 396), which stresses relational properties, such as physical proximity, duration, and frequency of contacts, influence psychological states, identity, and worker behavior. The statements presented here converge to highlight the importance of the effects of relational resources on behavior. However, research of this type has been restricted to the effects of social support and confidence in the allocation of energy at work (e.g., Othman & Nasurdin, 2013). From these notes, the central idea of this research (detailed in the development of hypotheses in the next subsection) is that behaviors which reflect the allocation of energy at work (engagement) and the level of achievement of tasks (performance) are influenced significantly by the degree of intra-organizational social connection.

Intra-organizational social connection, engagement, and job performance

Engagement at work is the employment and expression of physical, cognitive, and emotional energy of organizational members in executing their roles. The degree of allocation of these types of energy describes to what extent social actors adjust their ego in organizational roles (Kahn, 1990; Rich et al., 2010; Saks, 2006). A high degree of engagement is seen as an organizational member who is task orientated, physically absorbed by the performance of their work activities (when they are available or psychologically present), and has active, positive emotions (Christian et al., 2011; Freeney & Fellenz, 2013; Rich et al., 2010). Discussions on the factors that contribute to increased engagement invariably recognize the role of characteristics of the work as a central element, but of course it is not the only or the most important set of predictors for this behavior (e.g., Bakker et al., 2007; Kahn, 1990; May, Gilson, & Harter, 2004; Olivier & Rothmann, 2007; Saks, 2006).

Aiming to expand the set of known predictors of engagement, some research has begun to examine the role of relational features in the variation of energy expended at work (e.g., Bakker & Bal, 2010; Freeney & Fellenz, 2013). Freeney and Fellenz (2013)—for example—from an investigation into two maternity hospitals, presented evidence that a social support supervisor increased engagement at work for midwives. Bakker and Bal (2010) also found positive effects in the relationship between focal actors and their supervisor in teachers' level of engagement. Saks (2006), in a study with 102 respondents of various functions in different organizations, pointed out that a supervisor's social support was not related to engagement in their sample, but that social support from the organization was. Othman and Nasurdin (2013), in a sample of 402 nurses from three hospitals in Malaysia, found positive effects of supervisor support on engagement, as well as no significant relationship between this dependent variable and the support of colleagues. Olivier and Rothmann (2007), from a survey of 171 employees from a petroleum company, showed that both adjust to the type of work because norms and relationships with colleagues are significant predictors of engagement.

As exemplified above, studies that focus on the interaction between relational resources and engagement at work predominantly employ the notion of social support (in organization size, supervisors, and colleagues) as an independent variable. Such investigations just repeatedly focus on these kinds of social ties. Some exceptions are recent works that relate engagement to charismatic leadership (Babcock-Roberson & Strickland, 2010) and confidence (Lin, 2010). In this sense, the role of intra-organizational social connection in the degree of engagement at work can contribute to delimit, like other types of relational content (i.e., the actions of local ties in the construction of meaning in which the focal actor is connected to the organization), what influences this type of behavior.

More precisely, the argument that the higher the degree of intra-organizational social connection the greater the degree of engagement is focused on the idea that local ties (alters) of a focal actor (ego) contribute to the development and sustenance of psychological conditions, which act as drivers of the level of energy intensity allocated to work (Bakker & Bal, 2010; Freeney & Fellenz, 2013; Kahn, 1990). The seminal work of Kahn (1990) defines the concept of engagement through ethnographic data collected in an architectural firm and summer camp. He found that three psychological conditions centrally affect the amount of energy invested in work: significance, safety, and availability.

Intra-organizational social connection—i.e., the evaluation of contacts (alters) that the ego has more frequent interaction

with—behave in a way that includes them in an intra-organizational network and make these relationships familiar and cohesive (Balkundi & Harrison, 2006; Maciel, 2015; Maciel & Camargo, 2015). These effects, to some extent, satisfy the psychological conditions for engagement. According to Kahn (1990), work is seen as meaningful when there is a sense of return of efforts when one's experience in the organization feels of value. This feeling of appreciation is due in part—as outlined—to the general perception of inclusion in an intra-organizational network. Kahn demonstrated that the perception of significance of the work varies according to workplace interactions, as such interactions provide a sense of belonging and appreciation.

The second psychological condition is safety. Kahn (1990) explains that this feeling is found when the organizational actor has no fear of being exposed to colleagues during the performance of their activities. The perception that there will be no adverse consequences from alters enables an easier and more tranquil allocation of energy by focal actors in activities. The sense of being connected to a cohesive group characterized by familiarity (Okhuysen, 2001) provides the conditions for this type of evaluation. According to Kahn, safety stems from personal relationships that provide support and do not generate feelings of being threatened, resulting in the organizational member perceiving the work environment as a safe place to express more freely the various parts of the self. The third psychological condition is availability, which means that the organizational member feels physically, cognitively, and emotionally willing to invest their energies at work. The influence of intra-organizational social connection on this kind of feeling is also justified in theory, because the focal actor's perception that their ties of more frequent interaction try to make them feel included contributes to the judgment that they will receive support when applying their physical efforts, attention, and positive valence at work (Kahn, 1990; Saks, 2006). From such assertions, hypotheses were deducted that relate intra-organizational social connection to the three dimensions of engagement.

H_1. The degree of intra-organizational social connection relates positively to the degree of physical engagement at work.

H_2. The degree of intra-organizational social connection relates positively to the degree of cognitive engagement at work.

H_3. The degree of intra-organizational social connection relates positively to the degree of emotional engagement at work.

Task performance is one of the overall job performance dimensions (Ng & Feldman, 2009) and is traditionally considered in seminal studies on worker evaluation. It is defined as the achievement of specific behaviors that are expected based on the job description (Rich et al., 2010; Sonnentag, Volmer, & Spychala, 2008). Sonnentag et al. (2008) noted that the quality of specific behavior varies depending on a variety of antecedents that have been extensively studied in relation to the individual nature of predictors (e.g., cognitive skills, knowledge, attitudes toward the organization) and predictors of a situational nature (e.g., nature of the task). However, only recently has the role of relational aspects gained space in research agendas on performance (Grant, 2007; Rich et al., 2010; Sonnentag et al., 2008), but it tends to emphasize the influx of sociometric indicators, thus neglecting the importance of the content of ties (e.g., Evans & Davis, 2005; Mehra, Kilduff, & Brass, 2001; Sparrowe, Liden, Wayne, & Kraimer, 2001).

Emphasis on the content of ties is important for the focal agents to reflect on the actions of their ties (alters), and that the result of this reflection influences their performance. This is for two main reasons: first, because the focal actor has in their contacts—depending on the valence of the relationship—a resource that can be activated when there is need for assistance, knowledge, coordination, and emotional support from their peers; second, because the content of the relationship is subject to the norms of reciprocity—that is, when the focal actor feels that their ties try to give them a sense of well-being—social norms operate in a way that make them obliged to reciprocate (including in their job performance), because their work activities are often coordinated with other organizational actors and weigh on the evaluation of the group as a whole (Halbesleben & Bowley, 2007; Halbesleben & Wheeler, 2011). Halbesleben and Wheeler (2011) state that the norms of reciprocity (feeling in debt to another)—such as those that can be generated by the generalized perception that the contacts of the focal actor have included them in the intra-organizational network—drive the investment of resources in performance tasks. Therefore, the notion of intra-organizational social connections contributes to the variation of task performance—when operating as a relational resource—and is a source of positive norm reciprocity (Halbesleben & Wheeler, 2011). Thus, the fourth hypothesis of the study was deduced:

H_4. The degree of intra-organizational social connection is positively related to task performance.

Methodological procedures

To test the hypotheses, we opted for the survey as a research method. A graphics company located in the south of Brazil was defined as the social context for research, which had almost one thousand employees during the time of study. To preserve the anonymity of the company, the survey's results will not disclose names. Questionnaires were distributed in all departments of the company, but only 271 were answered and returned. After excluding questionnaires that were incomplete or had no variation in responses, the final sample consisted of 249 respondents. Thus, non-probability sampling was used for adhesion, involving only analytical possibilities for generalization and theory. The data analysis stage involved descriptive statistics, confirmatory factor analysis (CFA) with structural equations, and multiple regression analysis. For data analysis, PASW® and AMOS™ version 18 software were used.

The data collection instrument (i.e., structured questionnaires) consisted of interval, nominal, and ratio scales. A 10-point scale was used for interval measurement. According to Fornell (1992), this variation in responses improves the quality of the data distribution by reducing indices of asymmetry. Engagement at work was measured by Rich et al.'s (2010) scale.

This measure has six indicators for each of the three dimensions of engagement (i.e., physical, cognitive, and emotional), totaling 18 items. In the original study, this scale was only evaluated for validity by Cronbach's alpha = 0.80 for a high-order factor. The task performance scale measures the degree to which the requirements of a respondent's role are being effectively met. The measure was adapted from Williams and Anderson (1991) and comprises of seven affirmations. The indicators of this scale were changed from the third person to the first person singular to facilitate respondent understanding. In the study by Williams and Anderson (1991), this scale presented Cronbach's alpha = 0.80. The degree of intra-organizational social connection was evaluated by four indicators developed by Maciel (2015) from the literature on social networks and relationships (Maciel & Camargo, 2015). This scale presented average variance extracted (AVE) = 0.55, composite reliability = 0.82, and Cronbach's alpha = 0.80 in the original study. Appendix 1 contains the diagram used to assist the respondents of the questionnaire. Overall satisfaction was used as a control variable to verify how intra-organizational social connection relates to engagement and performance, even in the presence of influences of satisfaction on these dependent variables. Satisfaction was assessed using a scale composed of five indicators by Brayfield and Rothe (1951), which is widely used in research on organizational behavior. This scale was assessed in the original study by the Spearman–Brown coefficient = 0.87. All indicators in English were translated and adjusted when necessary. Ratio scales (age and time at the company) and nominal scales were also used as control variables in the testing of the hypotheses. Age and time at the company were measured in years. Nominal variables followed these encodings: sex (0 female, 1 male), marital status (0 single, 1 married), education (0 completed high school, 1 completed higher education), position (1 operational, 1 supervision, 0 coordination or above).

Validation of the measurements

Interval measurements in the survey were examined in terms of validity and reliability. For this procedure, CFA analysis was applied, defining the maximum likelihood as an estimation method (Hair, Anderson, Tatham, & Black, 2009). Asymmetry analysis indicated that the variables had indices between 0.73 and −1.36, enabling the application of this estimation method. According to Schumacker and Lomax (2004), asymmetry values between ±1.50 permit application techniques that presuppose normality without incurring losses with respect to Type I and II errors. All interval indicators were submitted to CFA for a structure with six first-order latent variables. Good quality of adjustment of the empirical data matrix to the theoretical framework for the measures χ^2 [1411.71]/Degrees of Freedom [512] = 2.75, and root mean square error of approximation = 0.08 were found (Hair et al., 2009). Comparative fit index = 0.88, the incremental fit index = 0.88, and the Tucker–Lewis index = 0.87 can be considered reasonable, because they are very close to the reference of (0.90) (Schumacker & Lomax, 2004). Even though an additional sample for independent validation was not featured, post hoc analyses for the model's CFA were observed, which presented no strong covariance to indicate the need for a new specification. Residual correlation indicated a poor fitting model.

The results from the CFA (shown in Table 1) confirmed the validity of the convergent indicators as the standard position for each of the items was statistically significant ($p < 0.01$). Cronbach's alpha (α) is above 0.80 for all factors, indicating good internal consistency of the measurements. Discriminant validity was also proven to verify the correlation among the factors, which when squared was below the AVE (Fornell & Larcker, 1981). Composite reliability was also high in all factors (>0.70), as detailed in Table 1.

Analysis and discussion of results

In the study, 65.1% of the sample are male respondents and 34.9% are female, 43.7% of whom are married. In relation to the level of education, 51.9% had completed high school and 48.1% had completed higher education. The average age is 31 years old. The average time at the company is 4.72 years. The distribution at hierarchical levels reveals that 56.5% are in operational positions, 27.4% in supervisory positions, and 16.1% in positions above supervisor. The means of the continuous variables and correlations appear in Table 2. These correlations are presented only to show that there were significant associations among variables and, therefore, that testing of the hypotheses using multiple regression analysis was justified.

In multiple regression analysis applied to the testing of hypotheses (as shown in Table 3), eight models were prepared, including one for each dependent variable only with the control variables and another with the control variables and the main effect also combined for each of the variables to be explained. The results of the hypotheses have been considered from the second regression model for each dependent variable, i.e., the hypotheses are only tested in models 1 (Hypothesis 1), 4 (Hypothesis 2), 6 (Hypothesis 3), and 8 (Hypothesis 4). In models 1, 3, 5, and 7, only the control variables were considered, which does not permit the analysis of the hypotheses. According to Pedhazur and Schmelkin (1991), comparison of the model of the control variables with the model that includes the insertion of the main effect of variables is commonly used to assess the partitioning of variance and its increase in terms of explanatory power. In model 1, for example, the control variables have an adjusted $R^2 = 0.26$. When the intra-organizational social connection variable was inserted, it did not increase adjusted R^2, i.e., there was no increase in relation to the model of the control variables.

Hypothesis 1, which positively relates social connection to physical engagement, was not proven. However, the model of the control variables has an adjusted $R^2 = 0.26$, showing that men, people with higher education levels, and operational positions rather than management expend more physical energy during their activities. This finding, which is different to the literature, is interesting because it suggests that physical energy used at work does not show variation (positive or negative) in relation to the social connection provided by their local network. Even in the absence of such relationship quality in the

Table 1
Confirmatory factor analysis.*

Description of manifest variables and reliability of latent variables	Loading
Emotional engagement (AVE = 0.65; Composite Reliability = 0.91; α = 0.91)	
I am enthusiastic in my job	0.760***
I feel energetic at my job	0.858***
I am interested in my job	0.826***
I am proud of my job	0.748***
I feel positive about my job	0.805***
I am excited about my job	0.822*
Physical engagement (AVE = 0.78; Composite Reliability = 0.95; α = 0.95)	
I work with intensity on my job	0.838***
I exert my full effort to my job	0.835***
I devote a lot of energy to my job	0.906***
I try my hardest to perform well on my job	0.919***
I strive as hard as I can to complete my job	0.863***
I exert a lot of energy on my job	0.918*
Cognitive engagement (AVE = 0.68; Composite Reliability = 0.92; α = 0.92)	
At work, my mind is focused on my job	0.809***
At work, I pay a lot of attention to my job	0.780***
At work, I focus a great deal of attention on my job	0.886***
At work, I am absorbed by my job	0.771***
At work, I concentrate on my job	0.866***
At work, I devote a lot of attention to my job	0.817*
Satisfaction (AVE = 0.72; Composite Reliability = 0.92; α = 0.92)	
I feel fairly satisfied with my present job	0.815*
Most days I am enthusiastic about my work	0.886***
Each day at work seems like it will never end	0.860***
I find real enjoyment in my work	0.836***
I consider my job to be rather unpleasant	0.844***
Performance (AVE = 0.65; Composite Reliability = 0.93; a = 0.92)	
I perform my duties properly at work	0.770*
I meet the responsibilities that are specific to my work activities	0.790***
I complete the tasks that are expected of me	0.835***
I met the demands of my work	0.889***
I prioritize the activities that directly affect the evaluation of my work	0.834***
I take care of my mandatory work activities (I)	0.640***
I have failed to perform essential duties at my job (I)	0.751***
Intra-organizational social connection (AVE = 0.68; Composite Reliability = 0.89; α = 0.89)	
My contacts at work make me feel that I am part of the organization	0.828*
My contacts at work make me feel included in the organization	0.884***
My contacts at work make me feel that I am part of an integrated group	0.862***
My contacts at work make me feel like I am at home	0.714***

Source: Prepared by the authors.
*** $p < 0.01$.
* Significance not calculated (parameter at 1). (I) inverted indicator.
a: Cronbach's alpha (Reference = 0.60). AVE: (Reference = 0.50).

local structure of the focal actor, energy expended during work activities does not suffer. Thus, other factors supported by the literature, such as the nature of the task, may be a variable of greater explanatory power for physical engagement, for example. Hypothesis 2 maintains that there is a positive influence of social connection on cognitive engagement. The relationship has been proven in a model that elevates the adjusted R^2 of the 0.26 control variables, mainly caused by satisfaction ($\beta = 0.50$, $p < 0.01$) and supervision positions ($\beta = -0.18$, $p < 0.05$) for adjusted $R^2 = 0.45$, where only the control variable satisfaction ($\beta = 0.16$, $p < 0.05$) and the main effect of the variable intra-organizational social connection ($\beta = 0.55$, $p < 0.01$) were statistically significant. Unlike that found in the relationship between intra-organizational social connection and physical energy used at work, cognitive engagement is explained by the quality of the focal actor's relationships (i.e., egocentric network) (Maciel, 2015; Maciel & Camargo, 2015). The feeling of being in a relationship with people who are striving for the individual to feel included in the organization increases cognitive efforts directed at work. This kind of judgment resulting from intra-organizational social connection allows greater familiarity and tranquility because it reduces uncertainty and insecurity, allowing attention to be applied to work rather than being concerned about social inclusion in the workplace (Maciel, 2015).

Hypothesis 3—the first tested relationship—was also not proven. The argument that the greater the social connection the more emotional engagement there will be was not supported statistically. However, the model of the control variables presented adjusted $R^2 = 0.60$ for satisfaction ($\beta = 0.77$, $p < 0.01$), operational position ($\beta = 0.18$, $p < 0.05$), supervision position ($\beta = 0.12$, $p < 0.10$), sex ($\beta = -0.10$, $p < 0.05$), and age ($\beta = 0.12$, $p < 0.10$), which proved to be statistically significant predictors of emotional engagement. This discovery enables us to affirm that intra-organizational social connection that originates from local ties does not extend to the organization, but also that it does not compete with the emotional effort that is placed in work. In turn, Hypothesis 4 was proven, demonstrating that social connection is positively related to task performance. The model of control variables presented an adjusted $R^2 = 0.33$. In this model, the variables satisfaction ($\beta = 0.62$, $p < 0.01$) and operating position ($\beta = 0.25$, $p < 0.05$) are the only statistically significant predictors. For the main effect model, adjusted R^2 is raised to 0.49. In this last model, the main effect variable of intra-organizational social connection ($\beta = 0.51$, $p < 0.01$) and the control variables satisfaction ($\beta = 0.30$, $p < 0.01$) and operating position ($\beta = 0.17$, $p < 0.10$) were statistically significant predictors of job performance. The relationship between intra-organizational social connection and performance shows that the quality of local ties of the focal actor is also important for the company. As argued before, the judgment that direct contacts try to add a particular actor in an intra-organizational network can reflect instrumental assistance and emotional support that is offered by alters (i.e., the direct contacts of the ego). When this occurs, the norms of reciprocity are in charge of making the social actor assess this kind of support from local ties as well as that provided by the organization. Thus, the sense of duty and willingness to repay translates into job performance.

Table 2
Mean, standard deviation, and correlation among variables.

	x	*s*	1	2	3	4	5	6	7
1. Age	31.00	9.77	1.00***						
2. Time at company	4.72	6.07	0.63***	1.00***					
3. Satisfaction	7.70	1.73	0.25***	0.25***	1.00***				
4. Intra-org social connection	7.49	1.33	0.18***	0.19***	0.53***	1.00***			
5. Physical engagement	4.26	2.45	0.00	0.06	−0.09	0.08	1.00***		
6. Cognitive engagement	7.78	1.44	0.08	0.06	0.44***	0.67***	0.15**	1.00***	
7. Emotional engagement	7.11	1.34	0.28***	0.23***	0.78***	0.51***	0.07	0.47***	1.00***
8. Performance	7.27	1.20	0.10	0.16**	0.55***	0.67***	0.06	0.65***	0.52***

Source: Prepared by the authors.
*** $p < 0.01$ (two-tailed).
** $p < 0.05$ (two-tailed).

Table 3
OLS regression analysis results.

	Physical engagement		Cognitive engagement		Emotional engagement		Performance	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Control variables								
Sex	0.15**	0.15***	−0.04	−0.02	−0.10**	−0.10**	0.02	0.04
Age (Log)	0.07	0.08	0.11	0.04	0.13*	0.12*	0.01	−0.05
Marital status	0.07	0.08	−0.04	−0.00	0.05	0.05	−0.06	−0.03
Education	−0.41***	−0.41***	−0.05	−0.02	−0.02	−0.02	0.01	0.03
Position (operational)	0.21*	0.22*	0.18	0.09	0.19**	0.18**	0.25**	0.17*
Position (supervision)	0.05	0.05	−0.18**	−0.12	0.11*	0.12*	0.02	0.07
Time at company tenure (Log)	0.11	0.12	−0.04	−0.06	0.00	−0.00	0.07	0.04
Satisfaction	−0.08	−0.06	0.50***	0.16**	0.77***	0.74***	0.62***	0.30***
Main effect variable								
Intra-org. social connection		−0.03		0.55***		0.06		0.51***
F	9.94***	8.81***	9.76***	19.15***	39.67***	35.43***	13.33***	22.50***
R^2	0.29	0.29	0.28	0.47	0.62	0.62	0.35	0.51
Adjusted R^2	0.26	0.26	0.26	0.45	0.60	0.60	0.33	0.49

*** $p < 0.01$ (two-tailed).
** $p < 0.05$ (two-tailed).
* $p < 0.10$ (two-tailed).

In summary, the associations between intra-organizational social connection and engagement and performance variables indicate that the relational architecture of work is of real importance. Social connection demonstrates, for example, that the perception of the focal actor of their contacts of most frequent interaction provide them with a sense of inclusion, making the individual achieve higher levels of cognitive engagement and performance, but not greater physical or emotional engagement. Therefore, the existence of contacts that perform this type of inclusion role can satistify necessecities of psychological significance, saftey, and availability, which increases some kind of engagement but not all, as defended in the literature so far (Bakker & Bal, 2010; Freeney & Fellenz, 2013; Kahn, 1990). Thus, it is likely that the effect of social connection on each type of engagement is moderated by other variables (e.g., autonomy). Either way, the statistically significant relationship between intra-organizational social connection and cognitive engagement attests that this kind of content of social relations contributes to work being seen as (i) meaningful, because the interactions provide a sense of appreciation for the organizational member; (ii) a sense of safety, without fear of colleagues; and (iii) availability, which enables the work (Kahn, 1990). With regard to task performance, the results show that intra-organizational social connection actually produces positive conditions for the achievement of work. As argued in the construction of the hypotheses, the feeling of inclusion generates indebtedness toward contacts, and these feelings in turn extend to the organization, causing the employee to be more involved and invested in their efforts when carrying out work (Halbesleben & Bowley, 2007; Halbesleben & Wheeler, 2011).

Conclusions

This study aimed to examine the effect of local ties of organizational actors on their degree of engagement and job performance. This objective is justified by the critical examination of the influence of networks on behavior from measurements restricted to the structure of networks. Revisions on the ability of network theory (Emirbayer, 1997; Emirbayer & Goodwin, 1994) to explain behavior point to the need to look more closely at the reflections that social actors make about their ties. Networks condition, and are conditioned,

by the interpretation of these social actors. Therefore, intra-organizational social connection—reflected in the assessment that each actor (ego) makes—means that the role of inclusion played by their contacts (alters) of more frequent interaction in intra-organizational networks matters, and their capacity for agency should not be disregarded (Emirbayer & Goodwin, 1994).

In this sense, it is concluded that intra-organizational social connection operates really like a specific type of local ties, with the potential to generate positive effects on an individual's behavior at work. This conclusion is justified in the theoretical framework of this concept as a relational resource (Freeney & Fellenz, 2013; Grant, 2007). The results showed that cognitive engagement and performance are influenced by the degree of intra-organizational social connection, even in the presence of control variables (e.g., satisfaction, education, position). Thus, the idea that interactions with those people who behave in a way that make the individual feel familiar and included in a social group is strengthened. This behave generates feelings of indebtedness in accoradance with the norms of reciprocity, which drives the level of energy intensity at work (Halbesleben & Bowley, 2007; Halbesleben & Wheeler, 2011).

In general, the concept of intra-organizational social connection extends the range of different types of social ties that can be analyzed when investgating the conditions for an individual's behavior at work. It is possible that this type of content in intra-organizational relationships may be as important as those already established in the literature and may reach the same status as other social ties, such as confidence, reciprocity, friendship, and shared norms (Podolny & Baron, 1997).

Conflicts of interest

The authors declare no conflicts of interest.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.rausp.2016.07.005.

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