Social intra-organizational connection: effects in three relational domains

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Abstract

Purpose – The purpose of this paper is to present the construct of social intra-organizational connection (SIC). This construct reflects the extent to which a focal actor believes his alters present behaviors of social inclusion in relation to himself. This assessment compares the ego's expectations of being included and the behavior of inclusion performed by those alters with whom the actor has more frequent interactions. The effects of this construct are tested in the organizational domain regarding the intention to leave, in the domain of co-workers regarding cooperation and in the family domain regarding work–family conflict.

Design/methodology/approach – The survey data were collected from 380 Brazilian workers.

Findings – The results confirmed the effects of SIC in the relational domain of the organization through the variation in the focal actor's intention to leave. In the sphere of coworkers, the effects of SIC were found in the variation of the degree of cooperation. In the family sphere, SIC had an influence upon the intensity of the work–family conflict.

Originality/value – The research indicates that the behavior of making direct contacts and more frequent interactions by the focal actor extends to other relational spheres through the transitions of the organizational member between the domains of organization, coworkers and family. This paper draws attention to the need to consider the local networks, both within and beyond the organization, and their effects on each other.

Keywords Alters, Ego, Inter-domain transition, Relational domains,
Social intra-organizational connection

Paper type Research paper

1. Introduction

The social ties that constitute intra-organizational networks and the effects of those connections are widely recognized as central aspects in studies of social actor behavior at work. Such ties are observed in both the structure of intra-organizational networks and the content of relationships (Podolny & Baron, 1997). The network structure and content of relationships form an integrated duality referred to as a social network. Denser structures, in which almost all network actors are connected, contribute to a greater sharing of norms, trust building and cooperative behavior (Campos-Castillo & Ewoodzie, 2014).

Among the studies conducted from a more structuralist perspective, which emphasizes how network configurations and the positions of the actors are associated with behaviors (Campos-Castillo & Ewoodzie, 2014), some criticize the failure to consider the agents. In the

more traditional concept of social network analysis (SNA), being socially connected mainly refers to the mere existence of ties between the nodes of a relational system (Hanneman & Riddle, 2011).

Regarding the content of networks, the reflexivity and motivations of the actors who are socially embedded are considered core elements; thus, the emphasis falls on assessments that result from the choices that a social actor makes regarding his/her contacts and relationships (Kadushin, 2012). As illustrated by Emirbayer and Goodwin (1994), agency involves many types of experience, interpretation and awareness of things; agency is invariably directed toward something. Therefore, the assessment that a social actor makes of his ties and contacts is relevant in studies that presuppose an actor endowed with agency capacity (Okhuysen, 2001). This aspect takes into consideration the meaning and attitudes of a particular focal actor (i.e. ego) in a network, including in the interpretation of his/her own relationships with the characteristics and behaviors of his/her alters (i.e. direct contacts of the ego). The main implication of interpreting a focal actor amid his/her interactions with other social actors lies in reflecting on his/her social needs and the resulting generation of expectations. The concepts of ego and alters can be better understood if ego is thought of as the starting point in the observation of local social structure. If we ask an employee of an organization who his/her most frequent contacts are and he/she mentions three names, for instance, we will assume that the employee answering the question is the ego of this first local social structure and the contacts of this ego are the alters. When we ask an alter about his/her contacts, he/she then becomes the ego in our study, because he/she is now a starting point for evaluating the behavior of his/her alters.

Among the needs that are related to social interactions and relations, the primary one is safety (Kadushin, 2012). This need makes social actors seek affiliations that generate feelings of inclusion, cohesion and belonging. The satisfaction of this need is reflected in the identification of social actors, for example, regarding their well-being and happiness (Kadushin, 2012). However, it is surprising that the dynamics of exploring these expectations of intra-organizational actors by reference to their alters and through more frequent interactions (Granovetter, 1973) has hitherto been neglected in the field of organizational behavior. This type of relational content potentially has a substantive influence on other elements, such as identification; satisfaction with life and work; trust; and cooperation. Moreover, if a focal actor's expectations of being welcomed and included by his/her contacts are considered in cultural contexts that favor and promote this type of conduct, as is the case in Brazil, this phenomenon is even more important. This cultural characteristic is underscored by Holanda (2008, p. 146), who presents the Brazilian as the "cordial man." The emotional background of the Brazilian translates into hospitality, friendliness and generosity (Holanda, 2008). These characteristics transform the country into fertile ground for the construction and reconstruction of people's expectations of being welcomed and included by others in their social groups.

Because of these arguments and the surprising disregard of the effects of this specific type of role fulfillment by the focal actor's work alters, a definition and nomological testing of the concept of social intra-organizational connection (SIC) is proposed, which represents the degree of inclusion of a focal actor by those of his/her alters who provide the most frequent interaction (Granovetter, 1973). It is important to emphasize that this concept is not necessarily superior to the structural measurements of SNA, only different. SIC responds to the current and recurrent observations regarding the need to consider agency in social networks and, accordingly, how social actors interpret their contacts. According to Tasselli et al. (2015, p. 1361), aspects of structure and agency "coevolve in a dynamic process of reciprocal influence." Although the notion of "social network as a subjective construct" has

been highlighted for some time now (Stebbins, 1969, p. 1), there are relatively few studies that have expanded beyond structural measurements to address the awareness of social networks. In this sense, Gondal and McLean (2013, p. 124) pointed out that structures and actors that constitute social networks have "relational meaning".

Therefore, the concept of SIC emerges as a proposal for defining one phenomenon of the micro-foundations of social networks (Tasselli et al., 2015) and can contribute to identifying a psychological motive that keeps individuals connected to one another (Porter & Woo, 2015). The origin of the proposed SIC concept is also justified by the need to regard social networks as the intertwining of structure and relational meaning, or the structure and content of ties (Brands, 2014; Fuhse, 2009). In this sense, this concept does not compete with the structural measurements of network analysis, but is intended to complement it by defining the meanings and feelings of inclusion instilled in a focal actor based only on the behavior of his/her most frequent contacts (Granovetter, 1973), who constitute the perceived local structures (Brands, 2014) or microcosms of primary interaction between social actors in organizations.

For the nomological testing of the construct, variables in three relational domains were considered: organization, coworkers and family. Accordingly, the following research objectives were defined: to assess the effects of SIC upon cooperation with colleagues, the intention to leave the organization and work–family conflict. Thus, the main contribution of this paper is the demarcation of a type of social tie content and the evaluation of its effects in various relational domains in which social actors perform different roles under specific social norms.

2. Theoretical framework
2.1 Social intra-organizational connection
The structural SNA addresses social connection merely as a link between nodes on a graph. This concept is also extended to the idea of the "connectivity" of the graph, which shows the proportion to which the contacts represented in a sociogram remains connected to each other as some of them are sequentially deleted (Hanneman & Riddle, 2011). Psychology is restricted to showing that individuals can establish ties both with other humans and with anthropomorphized elements, such as religious figures and artifacts, and that these ties serve to reduce loneliness. In sociology, the term "connection" is commonly understood as a form of cohesion. Cohesion has been defined as reciprocity, a sense of belonging or attitudinal and behavioral similarity. In studies aimed at examining the connection in organizations, the definitions of these other areas have been used and implemented by means of various terms, such as social capital, similarity, integration, identification and belonging. In general, this amorphous characterization of social connection seems too broad, for it inhibits advances in comparisons between the results of various empirical investigations and proposing theoretical extensions in the area of organizational behavior.

Thus, in view of the imprecision and overlap between these concepts, the construct of SIC has been proposed. This construct reflects an overall assessment of the quality of the direct ties (*alters*) of a focal actor (*ego*) that arises from comparing his/her expectations of being included and the behavior of inclusion performed by those *alters* with whom the actor has more frequent interaction. In operational terms, the focal actor evaluates the performance of the roles of those of his/her *alters* who offer more frequent interaction and generalizes an attitude based upon the degree to which they serve to make him/her feel that he/she:

- belongs to the organization;
- is connected to the intra-organizational network;
- is part of a cohesive group; and
- is part of a group that can be considered familiar to him/her.

The emphasis on considering direct ties and more frequent interaction is justified by the fact that the *ego* generates more expectations of the behavior of inclusion in relation to these types of contact. According to Granovetter (1973), greater frequency of interaction between two social actors is one of the characteristics that indicate the existence of a stronger tie. While weak ties are responsible for the identification of non-redundant information, such as finding a new job opportunity, strong ties are central as a source of social contagion and a feeling of familiarity (Podolny & Baron, 1997). Kadushin (2012) states that when interactions between two social actors are more frequent, there is a greater possibility of generating a positive effect than a negative one. Therefore, it is expected that *alters* who have more frequent interactions with the focal actor more naturally provide behavior associated with the role of including the *ego* in the intra-organizational network.

As an example of the importance of SIC, it is worth considering studies of expatriates. These studies show the negative effects, in particular the lack of adaptation and even the need for repatriation, that occur when newcomers in a particular organization encounter coworkers who do not perform this role and do not behave so as to make the new member feel as if he/she is part of the organization (Yamazaki, 2010). As can be inferred from DaMatta (2004) and Holanda (2008) in contexts with culture traits such as those in Brazil, hospitality and cordiality appear as necessary modes of social navigation, so necessary that negative effects on attitudinal and behavioral variables of the focal actor result when they are lacking or inadequate.

Importantly from the standpoint of this paper, the negative or positive effects generated by SIC pervade the relational domain or sphere in which it occurs. This means that when a focal actor has direct and more frequent contacts who behave in such a way as to make him/her feel included in the intra-organizational network, the effects of this mode of connection extend to other networks of organizational actors, generating spillover effects. This argument is in line with two ideas: that networks exist within networks; and that new relationships stem from the previous networks of a social actor. In this sense, the proposal of this research to examine here the effects of SIC in domains with somewhat contrasting relational logic is justified. These domains are:

- relationship with the organization;
- relationship with coworkers; and
- relationship with family.

The relationship with the organization is distinctive because its members, via anthropomorphizing, ascribe personal characteristics to it and regard it as an agent that is different from their coworkers (Sluss & Ashforth, 2008). Relationships with one's colleagues are configured in a domain with mixed content, that is, with instrumental support (for tasks) and some expressive support (emotional support), with predominance of the former (Umphress, Labianca, Brass, Kass, & Scholten, 2003). The family sphere is characterized by the predominance of expressive ties (Umphress et al., 2003). Moreover, even though these relational domains are conceptually well-defined, the social actor is constantly in transition between domains. Such a transition is responsible for the spillover effects of SIC that occur in the local network and through the more frequent contacts of the focal actor.

2.2 Effects of social intra-organizational connection in three relational domains
In the consideration of the effects of SIC on the variables, three relational domains are involved – organization, coworkers and family. This is important for measuring the extent of its influence in spheres marked by distinct logics that guide the interaction between social

actors. Although focal actors and their coworkers are embedded in the same organization, the relationships in these two spheres are different. This differentiation results, for example, from the contractual relationship between the focal actor and his/her company. This relationship generates expectations, rights and duties in relation to the organization that are different from expectations regarding coworkers, in particular those considered to be closest. In turn, the family constitutes a relational space in which affective exchanges predominate (Wall & Gouveia, 2014). Thus, these domains enable the effects of SIC to be measured using different variables that represent the quality of the focal actor's relationships in these spheres.

2.3 Social intra-organizational connection and the intention to leave

As noted above, the relationship of the focal actor to his/her organization is examined through evaluating his/her intention to leave. To examine the relationship of the focal actor with his/her coworkers, cooperation with his/her colleagues was chosen as a variable representing the quality of the ties in this domain. To evaluate the relationship of the focal actor with his/her family, the variable of work–family conflict was used.

The intention to leave the work organization represents the degree of weakening of the relationship of this particular member with his/her institution. This type of behavioral intention is the result of a process marked by frequent dissatisfaction. The process is composed of different phases, the first of which is the evaluation of the quality of the work. It should be emphasized that the intention to leave is not a behavior, but rather an attitude of the employee that is reflected in the desire to end the relationship with his/her work institution. The variables that contribute to the formation of this attitude include several elements that go beyond job quality and satisfaction, such as identification with the organization, rewards, opportunities, commitment, performance and personal characteristics (Cotton & Tuttle, 1986). More recently, relationships with more frequent interactions at work have also come to the fore when examining the antecedents of the intention to leave.

In line with the relational perspective from which the intention to leave has been investigated (Soltis, Agneessens, Sasonova, & Labianca, 2013), it is argued that the advantages afforded by social ties, such as information and support, that are labeled social resources, contribute to better performance and satisfaction regarding work. To some extent, this satisfaction determines the strength of the intention to leave. In this sense, SIC is configured as a form of social capital, because it also provides the positive cognitive and affective properties that are present in other relational constructs, such as support by a leader, trust and identification. As a form of social capital, SIC ultimately has a perceived value for the social actor. Therefore, leaving the work organization means losing a resource: *alters* who make an effort to make one feel included, as if in a family environment and as if part of an integrated group. Thus, it is theoretically established that the greater the SIC, the lower will be the intention to leave:

   H1. The degree of social intra-organizational connection is negatively related to the intention to leave the organization.

2.4 Social intra-organizational connection and cooperation with coworkers

Cooperation with coworkers in the organization represents the total effort made and the degree of investment of other resources in the relationship of a specific member with his/her peers at work, but a relationship that is not necessarily restricted to the *alters* who offer more frequent interaction (Smith, Carroll, & Ashford, 1995). The cooperation may take the form of

proactive behavior (depending on the interests of those who cooperate) or reactive behavior (in response to group expectations). The levels at which cooperation is commonly examined range between individual, dyadic and group (cooperation with informal groups or work teams) (Marcus & Le, 2013). The reasons for cooperation include variables such as compensation for the result of the group, shared goals and identification. However, the literature indicates that cooperation with coworkers tends to be conditioned centrally because of norms of reciprocity (Axelrod & Hammond, 2006). Norms of reciprocity are shared orientations that put pressure on the social actors as a result of the expectations that there will be recompense for those that have provided something to the organizational actor (Goldstein, Griskevicius, & Cialdini, 2011). In these terms, SIC operates as a mechanism that sets the norms of reciprocity in action within the working group. Smith et al. (1995) indicate that high-quality relationships at work are prerequisites for cooperation. Lin (2006) states that employees who have good relations with coworkers create a potential subgroup, one with stronger ties between members and with each member more likely to help others, therefore giving rise to a feeling of obligation. Therefore, it is established that when a focal actor realizes that his/her *alters* conduct themselves in such a way as to make him/her feel like part of the organization, the norm of reciprocity operates to make him/her feel as though he/she has an obligation to compensate his/her coworkers through cooperation:

H2. The degree of social intra-organizational connection is positively related with the degree of cooperation with coworkers.

2.5 Social intra-organizational connection and work–family conflict
Work–family conflict reflects the measure of discomfort on the part of the organizational member with his/her family and personal life (see the items of the Work–Family Conflict Scale in Table I) according to the demands of these two spheres (Grzywacz, Carlson, Kacmar, & Wayne, 2007). This measure shows how much the organizational actor prioritizes work to the detriment of his/her family and personal life (Gutek, Searle, & Klepa, 1991). Such a conceptualization presents these domains as competitors because of the needs that an individual may have to conduct several inter-domain transitions (e.g. taking work home or bringing concerns and chores from home to work). The background of this type of conflict includes the demands of work and of family, as well as the stress arising from the impossibility of meeting these demands (Premeaux, Adkins, & Mossholder, 2007). Accordingly, Lu et al. (2008) argue that relational resources that cultivate well-being at work eventually relieve stress. Grzywacz et al. (2007) state that work and family can generate synergies when there are actors in one of these domains that facilitate the dynamic of interaction on the part of the social actors in the other domain. Therefore, SIC serves as a kind of resource at work that relieves stress and reveals contacts who can cooperate with the focal actor in his/her inter-domain transitions:

H3. The degree of social intra-organizational connection is negatively related to the degree of work–family conflict.

3. Method
3.1 Participants and procedures
The first step after the development of the theoretical framework and the hypotheses of the study was to contact an organization. An acquaintance of the researcher organized a meeting with one of the managers of the organization chosen for the research, which was conducted using a convenience sample.

| Manifest variables and reliability of constructs	Loading
Cooperation with coworkers (AVE = 0.68, composite reliability = 0.89, a = 0.89)	
I have made an effort to cooperate with those coworkers who depend on me	0.753!
I have made an effort in those activities that can make the work of others easier	0.839***
I have made an effort when doing work that influences the work of my colleagues	0.868***
I have tried to make my work not delay the work of my colleagues	0.825***
Intention to leave (AVE = 0.70, composite reliability = 0.90, a = 0.90)	
I am thinking about leaving this organization	0.859!
I am planning to look for a new job	0.931***
I intend to ask people about new job opportunities	0.899***
I don't plan to be in this organization much longer	0.626***
Work–family conflict (AVE = 0.51, composite reliability = 0.80, a = 0.79)	
After work, I come home too tired to do some of the things I'd like to do	0.588!
On the job, I have so much work to do that it takes away from my personal interests	0.767***
My family/friends dislike how often I am preoccupied with my work while I am at home	0.726***
My work takes up time that I'd like to spend with family/friends	0.748***
Norms of reciprocity (AVE = 0.71, composite reliability = 0.92, a = 0.91)	
I feel I owe something to my organization for everything it has done for me	0.828***
If I did something bad to my organization, I would feel guilty	0.825***
If I did something bad to my organization, I would feel that I was unfair to it	0.839***
I feel I have obligations to my company because of everything it has done for me	0.794***
I have an obligation to help my company to pay it back for what it has done for me	0.929!
Social intra-organizational connection (AVE = 0.55, composite reliability = 0.82, a = 0.80)	
My contacts at work make me feel that I am part of the organization	0.808***
My contacts at work make me feel included in the organization	0.804***
My contacts at work make me feel that I am part of an integrated group	0.789!
My contacts at work make me feel like I am at home	0.527***

Notes: ***$p < 0.01$; !parameter applied in 1; *a*: Cronbach's alpha; AVE: average variance extracted

The research population consisted of a total of 780 employees of an organization producing home appliances in the city of Curitiba, Brazil. All the employees were invited to participate in the study by completing a printed questionnaire. However, although a significant number of respondents answered the questionnaire, it was not possible to carry out a census. In this sense, the final sample of the study is a non-probability, convenience and volunteer sample. Even though we used volunteer sampling, we compared the sample we obtained with the research population. To this end, the gender distribution of the respondents was compared with the gender distribution of the individuals in the research population. This was the only statistical data provided by the organization to perform the comparison. Of the respondents, 67 per cent were men. This distribution of respondents by gender was close to the percentages of men and women in the organization as a whole, where 72 per cent of the employees are men. Figure 1 presents a summary of the main stages of the research after the development of the theoretical framework and the hypotheses.

All of the interval variables were scored on a ten-point Likert scale. This amplitude reduces the asymmetry in the distribution of the data. For scales translated from English into Portuguese, the procedure of back-translation was followed. The results showed a high similarity between the original and the translated scales. In the process of developing the scale based on the literature, ten items were generated for each construct, and three

Figure 1.
Summary of the main
stages of the research

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Summary of the main stages of the research
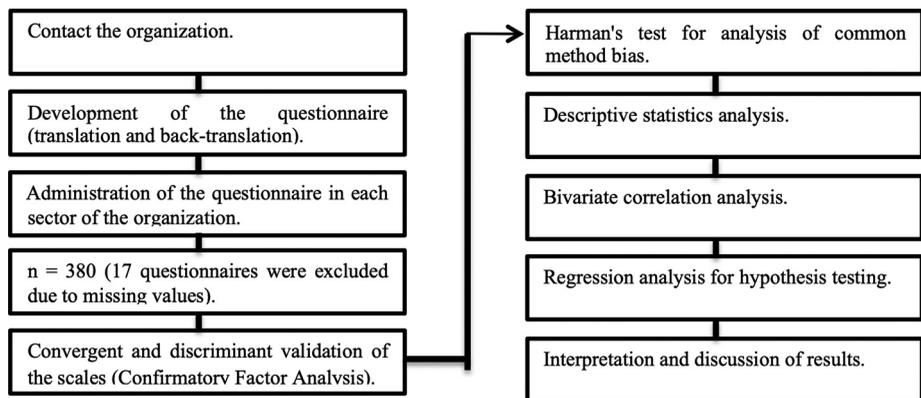
researchers pointed out which of these items most effectively represented what was intended to be measured. The data treatment was conducted with the support of version 18 of the SPSS® and AMOS™ software.

3.2 Measurements

Dependent and main effect variables. The intention to leave was measured using the items used in the study by Kelloway, Gottlieb, and Barham (1999). The scale of work–family conflict was extracted from Gutek et al. (1991). To assess the degree of behaviors of cooperation with coworkers, items were drawn from the literature (Lin, 2006). The main effect variable (SIC) was also measured via items developed from the literature on social networks and social relationships (Kadushin, 2012; Podolny & Baron, 1997). To encourage the respondent to consider his/her direct contacts, each participant was presented with a hypothetical egocentric network, and instructions in the body of the questionnaire indicated that in their assessment, they should consider only direct contacts and those of more frequent interaction with whom they maintained interactions every working day of the week.

Control variables. Besides the main effect variable, several control variables were also used in the regression models: gender (0 = *female*, 1 = *male*); age; marital status (0 = *single*, 1 = *married*); level of education (0 = *did not complete higher education*, 1 = *completed higher education*); operational role (0 = *coordination or direction*, 1 = *operational*); supervisory role (0 = *coordination or direction*, 1 = *supervision*); tenure; and norms of reciprocity. The scale of norms of reciprocity was also based upon the literature and developed specifically for this study (Cox, 2004; Goldstein et al., 2011; Perugini, Gallucci, Presaghi, & Ercolani, 2003). The inclusion of this variable allowed the direct effects of SIC together with the general effects of the sense of duty to the organization as a whole to be controlled, rather than only the direct and more frequent contacts or coworkers.

3.3 Validation of the measurements and evaluation of the common method bias

To validate the scales, confirmatory factor analysis (CFA) was applied with the method of the maximum likelihood estimation. CFA allows the determination of the adequacy of the manifest variables selected by the researcher to measure latent variables (ones that are not directly measured). CFA generates a set of adjustment measures that confirm the adequacy

of the variables. At the same time, it allows the researcher to confirm convergent validity and discriminant validity.

The tested model was found to be suitable, with $\chi^2(527.60)/df(179) = 2.94$, RMSEA = 0.07, comparative fit index = 0.93, incremental fit index = 0.93, Tucker-Lewis index = 0.91, all in accordance with the references suggested by the literature. The convergent validity of the indicators in their respective constructs was confirmed by the statistical significance ($p < 0.01$) of the weights of the indicators in the CFA (Table I). The discriminant validity was confirmed by both procedures. In the first, the latent variables were correlated with the squared one, and for none of the dyads was the correlation greater than the average variance extracted (AVE). In the second procedure, the tested model was compared with other factorial structures, which showed poorer adjustments, reinforcing the discrimination between constructs.

Because all the indicators used the same type of ten-point Likert scale in the same questionnaire, Harman's single-factor test was conducted, in which all the indicators of the variables are aggregated into a single first-order factor with constrained parameters. The results showed less than 10 per cent common variance between the manifest variables that can be explained by the collection.

4. Results

4.1 Analysis and discussion

Of the respondents, 67 per cent were men, and 62 per cent of the respondents were married. Only 33 per cent of the participants had completed a course of higher education. Operational positions were occupied by 77 per cent of the respondents, 13.5 per cent of the respondents were involved in supervision and 9.5 per cent were involved in coordination or direction. The average age was 32 years and the average tenure was five years. After descriptive analysis, the data were subjected to correlation analysis (Table II). Correlation analysis is useful for an initial examination of the relationships between quantitative variables, as in general it allows the determination of whether changes in one variable are associated with changes in another. Although these correlations do not establish a cause-and-effect relationship between variables, they constitute data to decide whether to use regression.

The hypotheses were tested using multiple regression by the ordinary least square (OLS) method (Table III). Multiple regression is a technique used for testing multiple relationships between variables simultaneously, allowing a set of several independent variables (predictors) be considered in the explanation of the variation in a dependent variable. Thus, in this technique, the various independent variables of a model compete in terms of the power of explanation of the dependent variable. Besides the main-effect dependent variables, control

Variables	Mean	SD	1	2	3	4	5	6
1. Age	32.74	10.67	1.00					
2. Tenure	5.06	5.75	0.39***	1.00				
3. Cooperation with coworkers	7.19	1.15	0.07	−0.07	1.00			
4. Intention to leave	2.59	2.17	−0.08	−0.03	−0.38***	1.00		
5. Work–family conflict	3.54	1.38	0.03	−0.07	0.04	0.48***	1.00	
6. Norms of reciprocity	6.20	1.71	0.21	−0.03	0.42***	−0.43***	−0.11**	1.00
7. Social intra-organizational connection	7.11	1.19	0.04	0.06	0.60***	−0.41***	−0.18***	0.43***

Notes: ***$p < 0.01$ (*two-tailed*); **$p < 0.05$ (*two-tailed*)

Table II.
Mean, standard deviations and correlations

	Model 1 Intention to leave	Model 2 Intention to leave	Model 3 Cooperation with coworkers	Model 4 Cooperation with coworkers	Model 5 Work–family conflict	Model 6 Work–family conflict
Control variables						
Gender	−0.07	−0.05	0.05	0.03	−0.07	−0.06
Age	−0.07	−0.08	0.06	0.07	0.10	0.09
Marital status	0.02	0.00	−0.03	−0.01	−0.06	−0.06
Educational level	0.08	0.10*	0.02	−0.00	0.09	0.10
Operational position	0.11	0.04	−0.13*	−0.00	0.10	0.06
Supervisory position	0.03	−0.04	−0.11	−0,00	0.05	0.01
Tenure	−0.02	0.00	−0.03	−0.06	−0.10	−0.09
Norms of reciprocity	−0.43***	−0.28***	0.40***	0.19***	−0.08	0.00
Main effect variable						
Social intra-organizational connection		−0.35***		0.51***		−0.19***
F	11.71**	16.61***	8.99***	21.63***	1.54	2.45**
R^2	0.24	0.33	0.19	0.39	0.04	0.07
Adjusted R^2	0.22	0.31	0.17	0.38	0.01	0.04
Durbin–Watson	1.88	1.91	1.80	1.93	1.81	1.81
VIF	<2.38	<2.44	<2.38	<2.44	<2.38	<2.44

Notes: ***$p < 0.01$ (*two-tailed*), **$p < 0.05$ (*two-tailed*), *$p < 0.10$ (*two-tailed*). Variables of age and tenure converted (log)

Table III.
Results of the
analysis of the
ordinary least square
(OLS) regression

variables can be included to prevent over-dimensioning the effects and the statistical significance of the main-effect independent variables.

The dependent variables were related to the control variables (Models 1, 3 and 5), and then the main effect variable was added (Models 2, 4 and 6). In all of the models, it was found through an inspection of the distribution of residuals that there were no problems with heteroscedasticity, non-linearity or a lack of normality. The Durbin–Watson statistic, with values near 2, suggests that there were no problems with autocorrelation. The values of the variance inflation factor (VIF < 5) indicate that there was no multicollinearity among the independent variables.

As indicated in Table III, the three hypotheses were supported. The adjusted R^2 of the models with the inclusion of the main effect variable of SIC increased substantially compared to the models of the control variables. *H1*, which predicted a negative relationship between SIC and the intention to leave, was supported ($\beta = -0.35$, $p < 0.01$) by Model 2 (adjusted $R^2 = 0.31$). *H2*, which proposed a positive relationship between SIC and cooperation with coworkers, was also supported ($\beta = 0.51$, $p < 0.01$) by Model 4 (adjusted $R^2 = 0.38$). In turn, according to *H3*, a negative relationship between SIC and work–family conflict was confirmed ($\beta = -0.19$, $p < 0.01$) by Model 6 (adjusted $R^2 = 0.04$).

These findings show that the concept of SIC is able to explain the variety of phenomena that constitute the relationship between the focal actor and the three different domains of organization, coworkers and family. More specifically, the spillover effect of the behavior of the focal actor's *alters* at work with regard to other relational spheres was highlighted. The proof of a negative relationship between SIC and the intention to leave shows that when the focal actor has contacts who play the specific role of exhibiting an effort to make him/her feel he/she is part of the intra-organizational network, the organization itself benefits. To some extent, the recognition of the positive valence of the relationship with direct contacts causes a transfer (Sluss & Ashforth, 2008) of positive attitudes from one domain to another, and the intention to leave is diminished. It should be noted that this argument stems from analyses in which feelings of duty to the organization were controlled through the construct norms of reciprocity.

The support of the positive relationship between SIC and cooperation with coworkers corroborates the idea that the widespread perception of the focal actor that his/her direct contacts care about his/her integration contributes to his/her repaying the efforts of these contacts and others that maintain relationships in the organization. The negative relationship between SIC and the work–family conflict that was supported shows that the inclusive behavior of *alters* regarding the focal actor reaches limits that transcend the organization. The scale that was used considers the degree to which work negatively affects the personal life of the organizational member. Therefore, the perception of conflict and stress can be reduced by the feeling of inclusion in the intra-organizational network or avoided through support at work for the focal actor from coworkers who are concerned about his/her inclusion, with the result that she/he takes less work and concern home.

In general, the construct of SIC reveals how a specific type of social tie in a micro-domain of the egocentric network, that of direct contacts and more frequent interaction of the focal actor, differs from the notion of informal groups as well as from the concept of work teams, which has inter-domain implications in respect of the relational spheres of the organizational actor. This means specifically pinpointing the type of relational content (Emirbayer & Goodwin, 1994) present during inter-domain transitions in the relationships of social actors who seek to satisfy one of the main basic needs of the individual, which is safety (Kadushin, 2012). In addition, the concept of SIC makes a particular contribution in the sense of considering the mechanisms that operate, respectively, in the designated relational domains

of organization, coworkers and family. In the organizational sphere, a social mechanism of attitude transfer operates in relation to contacts, such as SIC, regarding attitudes in relation to the organization. In the sphere of coworkers, there is a mechanism of the norms of reciprocity generated by SIC and reverting in cooperation in this domain, whose effect is more significant than that of the direct contacts and more frequent interactions. In the family sphere, the mechanism generated by SIC is the compensation of work–family conflict stress through the collaboration and emotional support of those who want to include the focal actor.

5. Conclusion
5.1 Summary
The objective of this research was to present the concept of SIC and measure its effects on the intention to leave an organization, on cooperation with coworkers and on work–family conflict. These dependent variables were chosen because they reflect the quality of the interactions of the organizational member in three different relational domains: organization, coworkers and family. It is interesting to consider these three relational domains because they show the focal actor being guided by the different logics of interaction and assuming distinct roles in each of them because of the social norms that operate in different local networks or social circles (Kadushin, 2012). The results show how the quality of the relationship in one domain affects the quality of the interactions of the focal actor in other domains. This perception reveals the importance of recognizing the implications of what an organizational focal actor carries along, in terms of attitudes, in the transitions from one relational domain to another.

Intra-organizational social connection is a relational scheme cognitively generated by a focal actor from the consideration of who the actors are with whom they interact more frequently in the organization. The main finding of the present study is that this global consideration of the content of relationships at work matters, because ISC seems to influence the relationship of the social actor with the organization, colleagues and even family and friends. This finding suggests that the meanings attributed to relationships in intra-organizational networks, especially those with primary contacts (local network), may reveal central aspects of the microcosms that the actors construct when they define the boundaries of their groups or cliques at work. This finding draws the attention of organizational managers to their role in the creation and maintenance of work teams, more specifically, to ensure the establishment of good relationships among its members.

Furthermore, our results show that ISC is a type of social capital that results in resources that generate positive effects for the organization. The basic need for human security seems to be largely satisfied by intra-organizational social connection to the point of mitigating negative attitudes and behaviors of the focal actors.

The definition of the content of these small-scale relationship networks contributes to the literature by highlighting the importance of the agency capacity and reflexivity of the agents in the relationship networks. By prioritizing the meanings of relationships instead of the structural positions of actors, the concept of ISC brings new light to the investigation of the micro-foundations of intra-organizational networks.

5.2 Practical implications
The main practical implications of the results of this study include the possibilities of job design planning (Morgeson & Humphrey, 2006) with a view to alterations in the SIC, in addition to the management of intra-organizational relationships for more adequate socialization of organizational members and a consequent reduction in turnover. A type of work with greater autonomy will frequently be associated with greater complexity of tasks

and greater knowledge requirements (Morgeson & Humphrey, 2006). These characteristics lead this type of work to encourage an exchange of information and the sharing of knowledge. This results in establishing expressive and instrumental ties between the focal actor and his/her *alters*. Therefore, the SIC will emerge as an increasingly important element in relation to the various other behavioral variables in the workplace. This means that the nature of a type of work could promote SIC by requiring more connections or ties to support *alters* in relation to the *ego*. The management of socialization tactics through allocating newly arrived employees in groups, work teams or communities of practice (Chang et al., 2009) can encourage the behavior of including *alters* in relation to the *ego*, i.e. SIC. Positive interpersonal relationships, such as this type of connection, can reduce turnover rates (Gosh et al., 2013). This complements the set of variables that are traditionally identified as antecedents of turnover: personal characteristics, job satisfaction, tenure, satisfaction with pay, empowerment, leadership (Pits et al., 2011), emotions (Helm, 2013), HR practices and job embeddedness (Bambacas & Kulik, 2013).

5.3 Limitations and suggestions for future research
The main limitation of this study is the possible effects of common method bias, even after applying Harman's single-factor test. Podsakoff, Mackenzie, and Podsakoff (2012) question the accuracy of this test and suggest precautions that, however, could not be taken here because the data on independent and dependent variables were not collected from different sources, at different times or using different scales. Another limitation is the absence of variables not theoretically correlated with the dependent variables that could thus operate as *marker variables* (Podsakoff et al., 2012).

Another limitation of this study is the embeddedness of the researchers in different work teams or units. In the present study, it was not possible to control this dependence effect. In addition to this limitation, it has been pointed out that SIC can be confused with other types of social relations content, such as expressive ties and instrumental ties (Umphress et al., 2003). It is argued that SIC is a connection in a broader, socio-relational sense, because it is constructed attitudinally from the behaviors of both instrumental support and emotional support. We suggest future studies to tests relating expressive and instrumental ties with SIC and relate these constructs to other attitudinal and behavioral variables at work to evaluate the discrimination between these types of social tie content and other variables. To examine the discriminant validity of SIC, a comparison could be made using scales of expressive and instrumental ties (Manev & Stevenson, 2001); popularity (Cullen et al., 2014); and structural, relational and cognitive social capital (Lin, 2011). To establish the predictive validity of the proposed concept in future studies, a possible suggestion is the inclusion of the variables cited previously as a control of the effects of SIC in the following dependent variables: organizational citizenship behavior and workplace deviance (Lee & Allen, 2002); organizational identification (Mael & Ashforth, 1992); commitment (Meyer & Allen, 1991); and engagement and job performance (Rich et al., 2010).

Future studies could also broaden the scope of the investigation of the spillover effects of SIC in several other cultural contexts and social domains. Research in countries with cultural traits different from those of Brazil could help to explain variations in the levels of SIC and the strength of its effects in different relational domains.

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