Exploring the role of Positive Leadership for Mobilizing Innovative Practices: a social network approach

Introduction

The importance of positive leadership for school and district improvement is receiving increased attention (e.g., Cherkowski, 2018; Seashore Louis & Murphy, 2018). In particular, it is suggested that positive leadership, when implemented effectively, can influence behavioural outcomes (e.g., collaboration among school staff), attitudinal outcomes (e.g., job satisfaction), leader-related outcomes (e.g., trust for leadership), performance outcomes (e.g., collective efficacy) as well as a wide variety moderating and mediating variables for these outcomes (Murphy & Seashore Louis, 2018; Eva, Robin, Sendjaya, van Dierendonck, & Liden, 2019). At the same time, there is little evidence about the role of positive leadership in relation to the mobilization of innovative teaching and learning practices, particularly practices that advance well-being and positive mental health for students and teachers. The mobilisation of such practices is of increasing importance in education systems that are 'self-improving': i.e. which rely on teachers and schools understand what effective practice comprises and then sharing this practice widely (Brown, 2020). Correspondingly, this paper reports on a study which examined the associations between perceptions of positive school leadership, their behaviours as regards to innovative practices, and their connections to others within a multi-school network. The overarching research question guiding our work is, "How do perceptions of positive leadership alongside information about their school roles and social connections influence the potential for mobilizing innovative practices?"

We begin the paper by outlining several principles of positive leadership that are important for understanding the development of social capital in support of well-being and positive mental health. Following this we next introduce the notion of networks in education and how networks represent opportunities for channeling embedded social capital towards achieving school improvement targets, particularly in relation to mobilizing effective practices. We then posit several

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hypotheses about the mobilization of innovative teaching and learning practices related to well-being within the framework of positive leadership and education networks.

The Service-Grounded and Empathetic Principles of Positive Leadership

Positive leadership is a multi-dimensional conceptt that brings together aspects of transformational, distributed, authentic, servant, and ethical leadership models (for example, see Hoch, Bommer, Dulebohn, & Wu, 2018; Murphy & Seashore Louis, 2018). The complex nature of positive leadership is evident in Murphy and Seashore Louis's (2018) recursive model, where positive leadership is shown to have antecedents in notions of leader traits and moral characteristics, in leader behaviour, approaches to social exchange, and also to psychological empowerment. These elements are activated, aligned, and integrated by two factors that pervade all aspects of school leadership: *context* and *trust*. With this complexity in mind, we concentrate on the service-grounded and empathetic principles that inform positive leadership behaviour.

Servant leadership, or leadership that adheres to service-grounded principles (Murphy & Seashore Louis, 2018), describes a humanistic approach to leadership that begins from an orientation to serve rather than to lead. Despite some negative connotations arising from the term *servant* (e.g., see van Dierendonck, 2011), what such leadership signifies "is an (1) *other*-oriented approach to leadership (2) manifested through one-on-one prioritizing of follower individual needs and interests, (3) and outward reorienting of their concern for self towards concern for others within the organization and the larger community" (Eva et al., 2019, p. 114). Since its emergence, some forty plus years ago in the works of Greenleaf (e.g., Greenleaf, 1970, 1977), research exploring the theory and measurement of servant leadership has burgeoned (Eva et al., 2019; Van Dierendonck, 2011; Van Dierendonck, Nuijten, and Heeren, 2009). As a result there has been repeated demonstration of servant leadership's predictive validity over other leadership models on a variety of outcomes (including, for example, trust, affective commitment, individual-level task performance; team-level performances; Hoch et al., 2018; Lee, Lyubovnikova, Tian, & Knight, 2019). To date, most quantitative measures of servant leadership employ a combination of items for examining personal

traits and behavioural characteristics (Zhu, Zheng, Riggio, & Zhang, 2015). One measure that has

consistently demonstrated strong psychometric properties is Liden, Wayne, Zhao, and Henderson's

(2008) 28-item multidimensional scale. This examines leadership dimensions such as helping

subordinates grow and succeed. Furthermore, the 7-item short-form version of this scale (Eva et al.,

2019) has quickly gained purchase as a global measure of servant leadership, since it is able to

capture the seven dimensions represented in the 28-item scale, while respecting the ethical

concerns and notions of respondent fatigue associated with asking teachers to complete lengthy

questionnaires.

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A complimentary leadership model is that of empathetic leadership, which to date, has

received comparatively less attention. Empathetic leadership represents an approach to leadership

that recognizes leaders' roles in providing emotional support to followers. At the core of the

empathetic leadership approach the notion of empathy: a prerequisite for building strong, reciprocal

relationships by necessitating "an ability to suspend judgement and bias to walk in another's shoes"

(Greason & Cashwell, 2009, p. 4). Empathetic leadership compliments to servant leadership by

providing an awareness that recognizing, utilizing, and developing others' capacities requires leaders

to (a) develop an understanding of followers' perspectives, (b) communicate that understanding to

ensure its accuracy, and (c) act on that understanding in a helpful way (Harris & Lusk, 2010). An

empathetic leadership measure with promising psychometric properties is the 5-item scale

developed by Kock, Mayfield, Mayfield, Sexton, and de la Garza (2019), adapted from earlier

research into motivating language theory. The value of this scale in combination with the global

servant leadership scale is that it balances service-grounded principles with the possibilities of a

more collaborative, distributed approach to leadership.

Networks in Education

A network in 'education' is generally considered to represent a 'group or system of

interconnected people and organizations whose aims and purposes include the improvement of

learning and aspects of well-being known to affect learning' (Hadfield, *et al.,* 2006: 5). The

emergence of networks within education has, on one hand, been driven by the interconnected and pervasive nature of issues facing education (Dı́az-Gibson *et al.,* 2017). On the other hands, the value of networks has emerged through the ability of networked actors to engage with "the resources embedded in social relations and social structure which can be mobilized when an actor wishes to increase the likelihood of success in purposive action" (Lin, 2001, p. 24). In more concrete terms:

> Recent research suggests that relationships and collegial support are central for the retention, increased professionalism, and depth of engagement of educators. The stronger the professional network, the more likely educators—at all levels—are to stay in the profession, feel a greater sense of efficacy, and engage in deeper levels of conversation around teaching and learning. Thus the building and supporting professional [and affective] relationships and networks is a critical way to sustain the work of teaching and learning and ultimately of change. (Daly, 2010, p. 1)

A focus on networks and social capital in education systems leads to two general propositions (Borgatti, Everett, & Johnson, 2018); first, the position of school staff within their school and district social networks has bearing on the opportunities and constraints they will encounter, and second, school and district outcomes are a function of the social networks connecting school staff. Mapping education networks can therefore enable an understanding of the potential for mobilizing information, resources, and support for effective teaching practices (Daly, 2012). This point is especially salient against the backdrop of the aforementioned "self-improving school," which is now prevalent in high autonomy and high accountability education systems, such as England (Brown, 2020; Dowling, 2016). Achieving teacher and school improvement in these systems requires cultures of enquiry and learning to be established, both within and across schools.

The fundamental units of any education network are the edges or ties (relations) that connect school staff (nodes). *Instrumental* ties give rise to social networks grounded in a professional context (e.g., work-related advice, co-teaching), whereas *expressive* ties give rise to social networks grounded in affect and for which the professional context is secondary (e.g.,

friendship, venting, energy exchange and so on). The collection of ties defined on a group of nodes gives rise to relational patterns that, when combined with node attributes (e.g., perceptions, demographics), can be used to describe school networks and predict individual or group behaviour and attitudes (Carolan, 2014). The body of empirical research into advice-seeking relations is one of the richest in the education networks literature (e.g., Coburn et al., 2013; Farley-Ripple & Buttram, 2013, 2015; Moolenaar, Sleegers, & Daly, 2012) and tends to describe how professional exchanges contribute to improving curriculum and instruction. Expressive relations have received comparatively modest attention, especially in the context of education leaders (Daly, Brown, & Liou, 2016). The expressive relations of energy-exchange and venting are two containing valuable structural information about networks in terms of trust, engagement, and the perceived quality of ties among school staff (e.g., Daly et al., 2016; Finnigan & Daly, 2012). Much extant literature suggests attending to both instrumental and expressive ties, as it is through their combined influence that "the speed and ease with which information is conveyed through its different channels" (Moolenaar, Sleegers, Karsten, & Daly, 2012, p. 367) is best understood.

Innovation Within the Framework of Positive Leadership and Networks

We draw together the positive leadership and networks literatures in recognition that teachers' and school leaders' behaviours and social exchanges "help to determine not only the individual's productivity but also the overall work climate of the school" (Seashore Louis & Murphy, 2018, p. 172). Yet, at present, there is little empirical evidence about the extent to which positive leadership behaviours can create the conditions necessary for school staff to engage in innovative teaching and learning practices.

Of the growing number of instruments that seek to measure how educators are engaging with innovative teaching and learning practices in K-12 settings (e.g., see Lawlor et al., 2019), many are failing to capture "whether practitioners were being guided slavishly by the evidence or had combined it in a more intuitive, holistic way with their wider practical experience so that their overall ability to understand or tackle particular situations had been enhanced" (Brown & Rogers,

2014, p. 253). Conducting more adequate and appropriate measurements of the use of innovative practices requires an instrument to capture the extent to which people feel involved with any new approach; the extent to which they employ the new approach; and, as a result, the likelihood that the new approach will impact on practice and student learning. An instrument that meets these requirements is the 8-item scale from Brown and Rogers (2014) that combines Flyvbjerg's (2003) *Levels of Expertise* with Hall and Hord's (2020) *Levels of Use* instruments to measure possible changes in behaviour resulting from school staff engaging with innovative practices. Developed as a general scale for eliciting notions of expertise, the scale ranges from the educator not engaging with innovative practices, to them behaving as a novice, to them behaving as an expert user and making major modifications to the innovation to improve its efficacy.

In light of the above, we used our study to explore the following hypotheses:

H1. instrumental and expressive social ties are structured by both formal leadership and well-being leadership roles.

H2. instrumental and expressive social ties are structured by the extent to which they are engaging in innovative teaching and learning practices related to well-being.

H3. perceptions of the extent to which Federation leaders enact service-grounded and empathetic leadership principles are positively associated with the quantity and structured of instrumental and expressive social ties.

Methods

Research Design and Sample

A cross-sectional[1] survey methodology combining traditional and social network data collection methods (Carolan, 2014; Groves et al., 2009) was employed to generate an understanding of the interconnectedness of relational patterns within schools, perceptions of positive leadership, and individual efforts towards innovation. The case for this study was a federation comprising of

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[1] A limitation of this design is an inability to determine the direction of causation between attribute and network data

three infant schools in Hampshire, England (henceforth, the Federation). In response to a green paper jointly forwarded by the Department of Health and the Department of Education in England[2], well-being is presently a major focus for the Federation. As a professional learning network of three schools, the Federation is actively building capacity to support and promote students' and teachers' well-being and positive mental health. Collaboration among school staff has received particular emphasis as a mechanism for raising awareness and diffusing effective practices related to well-being. For example, leadership directives have included training with a local mental health team, encouragement to explore cross-sector partnerships (e.g., with universities) around the well-being role of schools, and heightened expectations for collaboration across schools to reduce teacher workload and improve work-life balance by sharing practices and building and harnessing social capital.

Initial online distribution of the survey paired with targeted reminders led to 31 teaching staff completing the survey resulted in a response rate of 84 percent. Demographic information was collected about teachers included sex, years of experience in current role, years of experience in current school, and the presence of formal leadership and well-being leadership roles. This is presented in Table 1.

Table 1: Sample Demographics

	Percent	Standard Deviation
Sex (female)	10.8	–
Formal well-being leadership responsibilities (yes)	27.0	–
Hold a formal leadership or support role	29.7	–
	Mean	
Years in current role	10.26	9.10
Years in current school	7.62	7.24

Data Collection

Our survey instrument used traditional Likert-type scales as well as several network questions. Combined, these two forms of question enabled representation of how school staffs'

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[2] Transforming Children and Young People's Mental Health Provision: A Green Paper

attributes gave rise to the observed patterns in several instrumental and expressive social networks. The Liker-type scales were as follows:

- Two 6-item scales for measuring participants' perceptions of the Federation's organizational climate for innovation (e.g., "The Federation experiments with new ways of working") and climate of trust (e.g., "Staff in the Federation trust each other")—see Brown, Daly, and Liou (2016) for the complete scales;

- The 7-item global servant leadership scale from Liden et al. (2015) to measure perceptions of how Federation leaders prioritize others' needs (e.g., "Leaders in the Federation make my career development a priority");

- The 5-item empathetic leadership scale from Kock et al. (2019) to measure perceptions of how Federation leaders express emotional support and understanding (e.g., "Federation leaders show concern about my job satisfaction"); and

- The 8-item scale from Brown and Rogers (2014) to measure possible changes in behaviour resulting from school staff engaging with innovative practices.

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Each scale was selected on the basis of having accrued substantial validity evidence in prior research. All individual scale items possessed response options ranging from 1 (strongly disagree) to 5 (strongly agree).

The network questions asked participants to report on several kinds of ties in order to describe their position in the Federation's social networks. Since September 2019 the Federation has experienced a large turnover in staff, after many years of stability, with corresponding changes to pedagogical approaches and collaborative working patterns. Mental health and well-being are a focus of the Federation's improvement plan, and correspondingly, these questions were designed to explore staff's responses to these changes in terms of their instrumental and expressive ties in the network. Instrumental, or work-related, network questions investigated who participants sought for advice with respect to (a) pedagogical content and (b) classroom management, both couched within the Federation's focus on well-being. Several follow-up questions further characterized the

instrumental social networks according to the frequency of interaction (daily weekly, monthly, or less than once a month), the mode of interaction (i.e., face-to-face, telephone, or online), and how interactions tended to occur (i.e., free choice, leadership directive, or both). Expressive, or affective, network questions investigated with whom participants experienced an increase in energy following exchanges as well as who participants turned to when they needed to vent (i.e., relieve emotional pressure through shared expression). For each question, participants were provided with a complete roster listing all teaching staff in the Federation in order to guard against recall error (Borgatti et al., 2018).

Data Analysis

Our analysis proceeded in two steps. First, we inspected participant demographics and the responses to all questions in order to generate initial impressions of survey data quality. The internal consistency of each scale was examined using Cronbach's alpha, with acceptable values taken to range from .70 to .95 (Bland & Altman, 1997). We then used standard descriptive statistics, correlational analysis, and descriptive network analysis to develop an understanding of node attributes and the relational patterns explored in this study. This descriptive overview provided a sense of overall network structures and the degree to which network structure appeared to follow social symmetries (e.g., homophily).

Second, we examined the associations between node attributes and social relations using both categorical and continuous methods in order to test the hypotheses posed in this study. For categorical attributes, ANOVA models were run. For continuous attributes, or those approximating a continuous distribution, the spatial autocorrelation measures of Moran's I and Geary's C were calculated. Essentially, these measures provide a sense of how the proximity of two nodes in a social network is related to the attributes of those nodes (Borgatti et al., 2018). Roughly defined, these measures can be thought of as comparable to correlation coefficients, with Moran's I more attuned to global network structure and Geary's C more attuned to local network structure. The advantage of calculating both measures is that we are able to gain insight into the relational patterns of a

network as a function of global as well as local node characteristics. Finally, given that network data is inherently dependent, all inferential statistics were calculated using permutation-based versions of standard tests[3].

Findings

Descriptives and Correlations

We begin by presenting findings that describe the instrumental and expressive social networks existing within the Federation in relation to the formal leadership roles and innovative practices that support well-being, as well as school staffs' perceptions of servant and empathetic leadership behaviours. Descriptive statistics are summarized in Table 2, and relational patterns are summarized in the sociograms[4] set out in Figures 1 and 2. Inspection of the scale responses revealed that school staff on average believed their Federation possessed a strong climate of trust (76 percent scale maximum), an effective organizational climate for innovation (73 percent scale maximum), and positive perceptions about leaders' enactment of servant-based and empathetic leadership principles (73 percent and 79 percent scale maximum, respectively). Statistically significant, strong positive correlations existed between all pairs of these variables ($p < .001$). This finding suggests that teachers who perceived school leaders as enacting the principles of servant and empathetic leadership were more likely to also perceive their schools as possessing a strong climate of trust and an organizational climate for innovation. Additionally, the strong correlation between servant and empathetic leadership ($r = .868$) suggests there is likely considerable overlap in how teachers are perceiving these principles of positive leadership, at least for the instruments employed by this study. The innovative practices of individual staff, on the other hand, displayed no statistically significant correlation with either the trust and context variables or the positive leadership variables.

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[3] We used 20,000 permutations for each test.
[4] Given the strong positive correlation between servant and empathetic leadership found in this study (.868, $p < .001$), we chose to represent only servant leadership in the sociograms in order to avoid redundancy. Close visual inspection confirmed minimal differences between diagrams where nodes were sized by perceptions of servant leadership versus empathetic leadership.

As a result it seems that these aspects of the school environment alone appear insufficient for explaining how staff are engaging with new practices around well-being.

Turning now to the Federation's social networks, whole network measures revealed the greatest density[5] to exist for the energy network ($D = .13$), followed by pedagogical advice ($D = .11$), venting ($D = .08$), and classroom management advice ($D = .05$). Since we took the direction of ties into account, these densities, despite appearing low, do sit within commonly observed (e.g., Brown, Daly & Liou, 2016; Daly, Liou, & Brown, 2016; Farley-Ripple & Buttram, 2015). Examining tie direction specifically, the expressive networks possessed greater levels of reciprocity (venting 32 percent, energy 29 percent) than the instrumental networks (22 percent for both). That is, ties founded on affect were more likely to be reciprocated than those founded on professional context. Isolating the ties received by individual staff (known as in-degree centrality), statistically significant, strong positive correlations were found between all networks. This finding means that school staff who were frequently sought out in one social network (e.g., energy) were also frequently sought out in the other social networks. Moreover, the innovative practices of individual staff were moderately to strongly positively correlated with all but venting network nominations. For the case of the Federation, staff sought out for advice about pedagogy and classroom management as well as for energy were more likely to be engaging in more expert uses of innovative practices.

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Table 2: Descriptive Statistics and Correlation Matrix

Node Attribute	Mean (SD)	Correlation Matrix							
		1	2	3	4	5	6	7	8
1. Trust (max = 30)	22.94 (3.71)								
2. Context (max = 30)	21.77 (3.74)	.790**							
3. Servant Leadership (max = 35)	25.61 (4.68)	.637**	.574**						
4. Empathetic Leadership	19.81 (3.24)	.654**	.624**	.868**					

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[5] Density is the number of ties in a network as a proportion of the number possible. For example, a density of .10 means 10 percent of all possible ties are observed.

	M (SD)	1	2	3	4	5	6	7	8
(max = 25)									
5. Innovative Practice	3.06 (2.13)	-.037	-.044	.324	.026				
6. Pedagogy	3.84 (3.12)	-.196	-.343	.032	-.184	.659**			
7. Classroom Management	1.81 (2.10)	-.264	-.415*	-.002	-.215	.594**	.888**		
8. Energy	4.57 (2.71)	-.401*	-.454*	-.085	-.254	.446**	.823**	.807**	
9. Venting	2.92 (2.08)	-.401*	-.424*	-.135	-.267	.302	.712**	.675**	.904**

Note. The values reported for the relational dimensions correspond to in-degree centrality, which is the number of nominations a node receives from other nodes (e.g., if nodes A, B, and C report going to node X for energy, node X's in-degree centrality is 3 for energy). $*p < .05$, $**p < .01$.

The sociograms of Figures 1 and 2 are revealing in several ways not easily captured by the descriptives and correlations reported above. Specifically:

- For ties constituting the instrumental networks, 56 percent involved only pedagogical advice, 6 percent involved only classroom management advice, and 38 percent involved both. Conversely, for ties constituting the expressive networks, 42 percent involved only energy, 8 percent involved only venting, and 50 percent involved both. Hence, while the difference is slight, the expressive networks showed greater overlap, or multiplexity.

- More expert uses of innovative practices related to well-being appear concentrated, though not exclusively, on staff holding formal well-being leadership roles. Similarly, staff engaging in similar levels of use of innovative practices appear to cluster together (e.g., the orange nodes clustering in the upper right all reported "no use").

- Some school staff who are on the periphery of the Federation's instrumental networks (e.g., the small orange node in the upper right) appear to hold important positions in the Federation's expressive networks. In combination with the finding that innovative practices correlate with both instrumental and expressive ties, it appears that failing to account for both kinds of ties would lead to a distorted perception of how innovation is mobilized within and across schools.
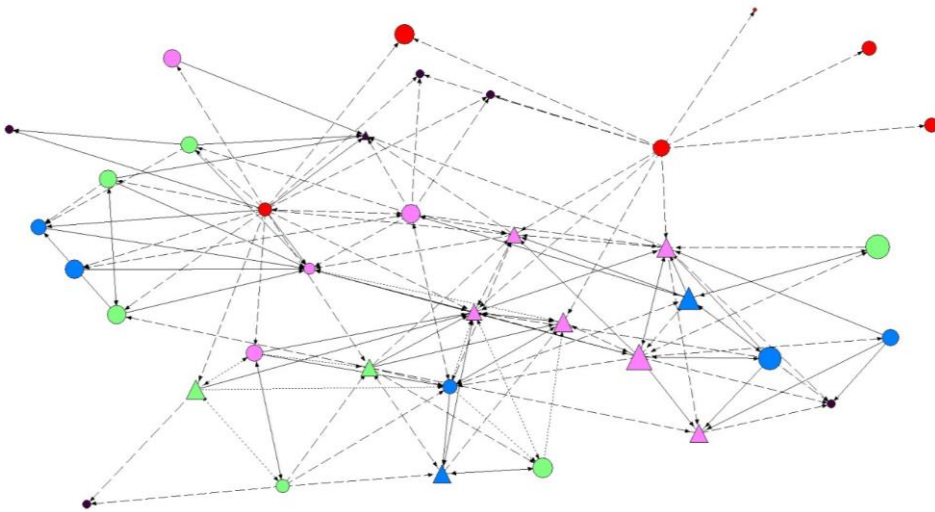
Figure 1. Instrumental relational patterns for the Federation
Dashed lines indicate advice-seeking for pedagogical content, dotted lines indicate advice seeking
for classroom management, and solid lines indicate both relations. Node size correlates positively
with perceptions of servant leadership, node shape corresponds to well-being leadership roles
(triangle = yes, circle = no), and node colour corresponds innovative practice (black = unknown,
orange = no use, green = preparing for use, blue = mechanical use, purple = expert use).
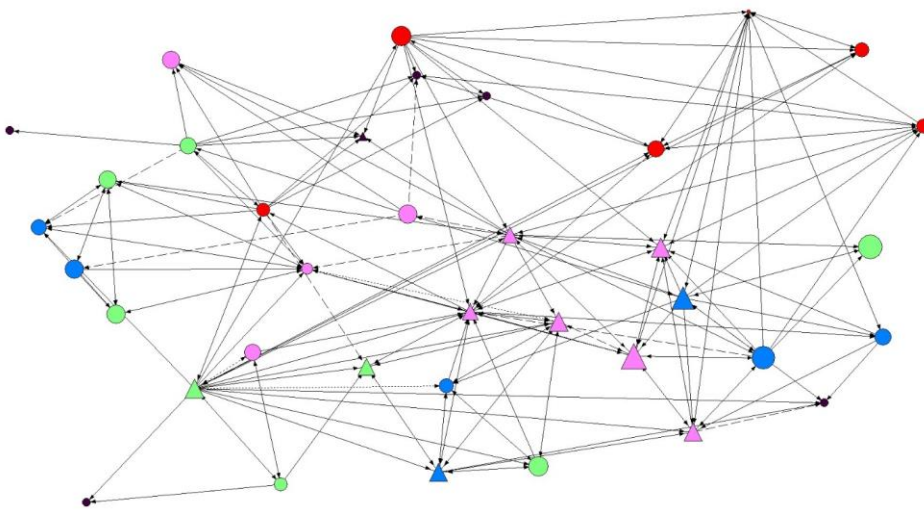

Figure 2. Expressive relational patterns for the Federation
dashed lines indicate energy seeking, dotted lines indicate venting, and solid lines indicate both
relations. Node size correlates positively with perceptions of servant leadership, node shape
corresponds to well-being leadership roles (triangle = yes, circle = no), and node colour corresponds
innovative practice (black = unknown, orange = no use, green = preparing for use, blue = mechanical
use, purple = expert use).

Inferential Statistics

The second set of analyses aimed to test the hypotheses posed in this study by examining how the Federation's instrumental and expressive networks were patterned by school staff's attributes, including their leadership roles, perceptions (e.g., servant leadership), and reported behaviours (innovative practices). Beginning with formal organizational leadership roles (i.e., subject leads, middle leaders, senior leaders), leader–leader ties were on average 14 percent more likely in the instrumental network and 16 percent more likely in the expressive network than teacher–teacher ($p < .01$) or teacher–leader ties ($p < .05$). Looking at well-being leadership roles, leader–leader ties were 15 percent more likely in the instrumental network and 20 percent more likely in the expressive network than teacher–teacher ties ($p < .01$) or teacher–leader ties ($p < .05$). Together, these findings indicate that ties between school leaders were marginally more likely than ties between two staff chosen at random for all social networks. Table 4 extends these findings by examining whether the school staff connected in each social network (columns) are more or less likely to be similar on each continuous attribute (rows) than two staff chosen at random.

Table 3: Spatial Similarity Tests Using Moran's I and Geary's C

Attribute	Relational Dimension							
	Advice: Pedagogy		Advice: Classroom Management		Energy		Venting	
	I	C	I	C	I	C	I	C
Trust	0.03	0.71	0.06	0.67	-0.04	1.09	0.10	0.98
Context	0.01	1.10	0.24*	1.02	-0.04	1.10	0.08	0.97
Servant Leadership	0.16**	0.71	0.15	0.66	0.04	1.03	0.06	1.16
Empathetic Leadership	0.14*	0.82	0.05	0.90	-0.08	1.19*	-0.04	1.15
Innovative Practice	0.31**	0.75	0.33**	0.52	0.36***	0.73	0.33**	0.75

*$p < .05$, **$p < .01$, ***$p < .001$

The significant findings noted in Table 4 indicate three general associations. First, staff who similarly perceive an orientation to innovation within the Federation were more likely to have a tie relating to classroom management advice. Second, staff with similar perceptions about Federation

leaders' enactment of servant and empathetic leadership behaviours were more likely to have a pedagogical advice tie, and for perceptions of empathetic leadership this extends to energy ties. Third, staff engaging in similar levels of use of innovative practices around well-being were more likely to have a tie in all social networks.

Conclusions

The aim of this paper was to present a case examining the potential for mobilizing innovative practices related to well-being within a framework of positive leadership and school social networks. Regarding formal leadership and mental-health leadership roles (Hypothesis 1), we can infer the latter was important not only in mobilizing advice about teaching practices and classroom management, but also in the expressive social networks that promote self-governance in school staff. Indeed, this is precisely the idea underlying servant leadership, wherein "leaders focus on providing for followers so that they reach their full potential, become empowered to handle tasks and decisions on their own, and who adapt to communal sharing and a culture of serving others" (Eva et al., 2019, p. 128). A related and important finding concerned the extent to which staff were engaging in innovative practices in terms of their position in the Federation's social networks (Hypothesis 2). Predictably, more expert uses of innovative practices related to well-being appeared concentrated on the staff holding well-being leadership positions. Although it is intuitively beneficial to have this concentration of expertise in individuals explicitly charged to promote and support well-being, comparisons between the instrumental and expressive networks suggest that some school staff were not strongly influenced by these leaders. We see this finding to reflect the importance of paying attention to how practices are mobilized throughout school networks. Against the backdrop of positive leadership, mobilizing practices requires that leaders have an authentic understanding of their staff, an attentiveness to their needs, and an ability to attune their behaviours to those needs (Seashore Louis & Murphy, 2018).

Finally, regarding the influence of school staffs' perceptions of servant and empathetic leadership behaviours (Hypothesis 3), while we did not observe a direct influence on individual

teachers engaging in more expert uses of innovative practices, it appeared that influence may be moderated through school social networks. As phrased by Murphy and Seashore Louis (2018), "in contrast to a simple leader-centric perspective, the culmination of dyadic relationships helps to shape the way in which all members work with one another to carry out a jointly agreed upon task" (p. 47). In sum, then, mobilizing overall school well-being requires attention not only to leaders' enactment of positive leadership principles, but also the ways in which leaders are positioned to facilitate social exchanges to that end.

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