

Expressive Ties and the School Reform Efforts of an Urban School District

¹Jackie Mania-Singer

Abstract

Large-scale education reforms have increased accountability for districts and schools and pressure on educational leaders to improve student outcomes. Data show, however, that school improvement is not universal. Research suggests that these reforms have failed because of the fragmented approach to reform and the limited attention given to expressive relationships. This qualitative case study draws on social network analysis techniques to examine the underlying social networks of an urban school district. Findings suggest sparse network ties in all areas included in the study indicating limited expressive relationships across all levels of the district leading to isolation of leaders.

Keywords: School Reform; Systems Thinking; Educational Leadership; Social Network Analysis

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Recommended Citation: Mania-Singer, Jackie (2018). Expressive Ties and the School Reform Efforts of an Urban School District. *Journal of Educational Leadership and Policy Studies*, 2(1).

Expressive Ties and the School Reform Efforts of an Urban School District

Federal education reforms of the past two decades have aimed at eliminating the achievement gap and improving student academic outcomes, particularly in the nation's lowest performing schools. The No Child Left Behind Act of 2001 (NCLB), the Race to the Top Fund (RTT), and the Elementary and Secondary Education Act (ESEA) Flexibility Waiver increased accountability for districts and schools by implementing achievement targets and high stakes testing, incentivizing implementation of rigorous improvement efforts, and establishing sanctions for so-called failing schools (NCLB, 2002; Race to the Top Fund, 2009; Elementary and Secondary Education Act, 2011). These reforms relied heavily on prescribed reform agendas focused on improving curriculum, leadership and teaching. Even the Every Student Succeeds Act (ESSA) of 2015, with its opportunity for flexibility and promise of increased local control, mandates accountability based on standardized assessments and rigorous interventions for lower performing schools. In response to federal mandates to improve student academic outcomes and eliminate the achievement gap between subgroups, states, districts and schools have invested billions of dollars in funding into the implementation of improvement practices.

Data from the last decade, however, show these large-scale reforms have not had the designed effect on student achievement. Increased accountability has, in some cases, resulted in increased pressure on school staff and unintended negative impacts on student academic outcomes (Finnigan, 2010; Finnigan, 2012; The Nation's Report Card, 2016). Despite decades of reform, districts and schools have shown little or no progress toward meeting the 100% proficiency benchmark or narrowing the achievement gap, particularly for disadvantaged students (Dee & Jacob, 2011; Fuller, Wright, Gesicki, & Kang, 2007).

Research suggests these reforms have been unsuccessful largely because they have focused on the technical aspects of school improvement, most often through a school-by-school approach, giving little consideration for the structures or relationships necessary at the district and school levels for successful implementation (Daly & Chrispeels, 2008; Daly & Finnigan, 2012; Leithwood, 2007). Specifically, recent research suggests that expressive ties, or interpersonal relationships associated with trust, well-being and satisfaction, between members of the school system may impact the exchange of information, knowledge, and resources necessary for successful system-wide improvement (Finnigan & Daly, 2012; Lin, 1999; Tschannen-Moran & Gareis, 2015). The purpose of this qualitative case study is to understand the social structures, specifically, the underlying social network related to expressive relationships, of an urban school district attempting to implement school reforms. Through the lens of social network theory, this study used methods of social network analysis answer the research questions:

1. In terms of expressive ties, what is the social network structure of the district in this study?
2. What are the principal and district central office staff perceptions of the expressive relationships within the district?
3. How does the social network structure of the district influence or impede system-wide reform efforts?

Relevant Literature

In the following literature review, I provide key research findings related to the history of school reform, the success of school reforms, systems thinking in school districts, district/school leadership and organizational change, and relational aspects of leadership including trust and expressive ties. Social network theory is presented as the theoretical framework for situating the findings of this study and the discussion.

History of School Reforms

For the past twenty years, federal education policy has attempted to mandate improved student academic outcomes and turnaround of the nation's lowest performing schools. Through a series of reforms based on incentives for improvement and sanctions for failure to meet performance standards, The No Child Left Behind Act (NCLB) of 2001 and the ESEA Flexibility Waiver (2012) increased accountability for and placed unprecedented pressure on districts and schools, specifically the nation's persistently low performing schools. These reforms required implementation of rigorous academic standards and focused on high-stakes state-level testing to measure student performance and identify schools in need of improvement. Although the Every Student Succeeds Act (ESSA), signed into law in 2015, provides for more opportunity for decision-making at the local level than the previous federal reforms, ESSA (2015) continues much of the accountability landscape ushered in by NCLB by requiring states to develop tiered intervention systems, increase state intervention strategies for schools failing to meet academic standards, and use summative assessments as part of a larger school accountability system.

These large-scale federal reforms have also heavily influenced state and local policy regarding school accountability and improvement. In response to NCLB and the ESEA Flexibility Waiver as well as the opportunity for federal grant funds through competitive programs such as Race to the Top (2012), state legislatures across the United States adopted a series of reforms that directly impacted local districts and schools. Most notably, many states adopted the Common Core State Standards, college and career-ready standards in English Language Arts and Math developed by a national working group of membership organizations (National Governors Association, Council of Chief State School Officers, 2018), and a teacher and leader evaluation system that bases a teacher's effectiveness rating and employment status on a combination of administrator observations and state assessment data (National Center for Education Evaluation and Regional Assistance (NCEE), 2014). Additionally, some states used NCLB and the ESEA Flexibility Waiver as a baseline, increasing accountability through state assessments above what was required by federal law. Although many of these state laws have been reformed or repealed (National Center for Education Statistics (NCES), 2015), when adopted, these laws fundamentally changed what teachers taught in the classroom (Nadelson et al, 2017; Shanahan, 2015), how teachers were evaluated annually (NCEE, 2014), and how performance of students and schools was measured (Dee & Jacob, 2010).

Success of School Reforms

Research on these large-scale school reforms indicates that there has been some improvement in student test scores since 2001. In a comprehensive study of the impacts of NCLB, Dee and Jacob (2010) found overall gains in math achievement of elementary school students. Specifically, higher rates of improvement were seen among disadvantaged students (Dee & Jacob, 2010). Other studies have found some evidence of narrowing the socioeconomic achievement gap in math (Lee & Reeves, 2012), an increased rate of proficiency growth for Hispanic students (Dee & Jacob, 2010; Lee & Reeves, 2012), and larger increases in proficiency for subgroups that received focused attention (Lauen & Gaddis, 2012). Additionally, research on programs specific to NCLB and the ESEA Flexibility Waiver, such as the School Improvement Grant (SIG) program, shows some improvement for the nation's lowest performing schools. Two studies on turnaround schools in Ohio and San Francisco Unified School District (SFUSD) found that the implementation of SIG strategies at the district level resulted overall increases in student performance in the lowest performing schools in Ohio (Player & Katz, 2016) and in a significant increase in achievement in both math and English Language Arts for SFUSD (Sun et al, 2017).

Despite evidence of success in some states and school districts, research also indicates that reform efforts have not been universally successful (Dee & Jacob, 2010). Gains in student achievement have not been consistent across states, grades, or subgroups (Lee & Reeves, 2012; USDE, 2017)

and despite the increased financial and human capital investment, student academic outcomes have not significantly increased in all areas nor has the long-standing achievement gap been eliminated (Dee & Jacob, 2010; Fuller et al., 2007, Lauen & Gaddis, 2012). Research also shows that while early gains were seen in both state level assessments and the National Assessment of Educational Progress (NAEP), trends plateaued in 2002-2003 signifying that the effects of NCLB have not been not sustainable over time (Fuller et al, 2007). In fact, when the ESEA Flexibility Waiver was proposed in 2011, then Secretary of Education Arne Duncan estimated that 82% of the nation's schools would fail to meet the education goals of NCLB despite 10 years of federal education reforms (United States Department of Education, 2011).

Systems Thinking and School Reform

Research suggests that one of the reasons that many reform efforts have not been successful is due to the historical focus on implementing reforms through fragmented efforts aimed at the school-level (Chubb & Moe, 2011; MacIver & MacIver, 2010; NCLB, 2002). NCLB (2002), the ESEA Flexibility Waiver (2011), ESSA (2015), and many state and local reforms approach school reform in a school-by-school approach, placing the responsibility for improvement mainly on school sites. Recent research suggests, however, that improvement does not occur in isolation (Myers & Smylie, 2017), but depends on all levels of the educational system taking intentional actions toward change (Daly & Finnigan, 2011; Fullan, 2010), and it may be integral for policymakers and educators to focus on the larger context of schools to better understand and support school-level improvement (Coburn, Choi, & Mata, 2010; Daly & Finnigan, 2012).

One perspective that emphasizes the larger context in which schools operate is systems thinking. Systems thinking is defined as “a means of seeing the system as an integrated, complex composition of many interconnected components that need to work together for the whole to function successfully” (Shaked & Schechter, 2017, p. 10). According to systems thinking, school districts operate much like complex human systems, in which the wholeness of the district is dependent on the interconnectedness and interrelationship of the inner parts (Banathy, 1988; Shaked & Schechter, 2017). Additionally, systems thinking views school districts as operating within larger communities which act as the outside environment, placing influence on and being influenced by the district. For the school district to operate as a successful system, then, the multiple parts within district must have a clear understanding of how their interaction with other parts of the system affects the larger system and knowledge of how each part of the system is interrelated (Banathy, 1988).

Systems thinking in education is not a new phenomenon (Banathy, 1992; Despres, 2004, Shaked & Schechter, 2017). In the 1960s, Banathy (1967) argued for a systems approach to education to address the complex problems of society and demands placed on education to face those problems. Researchers have since proposed systems thinking as a method for improving pedagogy (Cox et al, 2017; Mobus, 2018), influencing school leadership (Shaked & Schechter, 2017), and conducting educational inquiry (Banathy, 1988; Shaked & Schechter, 2017). Although research on systems thinking in education has existed for decades, according to Shaked and Schechter (2017), “Today, systems thinking is still not afforded the attention it deserves in the domain of school leadership” (p. ix).

District/Principal Leadership and Organizational Change

According to Banathy (1988), the failure of educational policy and practice to consider the larger system of schools has led to what he refers to as “piecemeal improvement” (p. 197), which is characterized as being disjointed from and lacking integration to the work of the larger system. He analogizes education's litany of reform efforts as “a warehouse full of many vehicle parts that do not fit into a whole” (p. 197). Recently, however, researchers in education have begun focusing on the concept of holistic district improvement, specifically, research indicates that the

interrelationship between the staff of the district central office and leadership at the school sites is integral to school-level improvement (Honig, 2008, 2012).

Historically, the district central office has served the role of manager or compliance monitor (Honig, 2013) focusing on the operational and business aspects of education and creating bureaucracies to address the growing regulatory environment of public schools (Honig, 2013). In the past two decades, however, increasing pressure from federal reforms such as NCLB (2001) and the ESEA Flexibility Waiver (2012) have caused school systems to rethink the work of the central office to better support schools (Honig, 2012). Specifically, district central offices have begun emphasizing collaboration and knowledge sharing between school and district leaders (Daly & Finnigan, 2011); leading holistically by creating and supporting system-wide missions, visions, and goals (Leithwood & Azah, 2017; Shaked & Schechter, 2017); leveraging district influence to acquire resources and provide differentiated support to school sites (Honig, 2012; Myers & Smylie, 2017); and brokering or facilitating connections between all parts of the system (Fullan, 2010, Honig, 2012). However, research on successful district central office transformations indicates that transformation of the district central office must move beyond the mere day-to-day work functions and fundamentally change the role of the district central office to include the creation of partnerships between district and school level staff that enhance autonomy and build leadership and instructional capacity (Fullan, 2006; Honig, 2008, Honig, 2013).

Relational Aspects of Leadership

As school district central office staff makes the transformation to a more assistive role, there is a growing body of research highlighting the importance of relational aspects of leadership positions within school systems. Research indicates that trust is an important component of school improvement (Daly & Chrispeels, 2007; Tschannen-Moran & Hoy, 2000). Trust has been positively associated with adaptive leadership (Daly & Chrispeels, 2008), openness in communication, and collaboration, specifically in regards to shared decision-making (Tschannen-Moran & Hoy, 2000). Additionally, school systems with high levels of trust may be less likely to isolate or reduce knowledge sharing when faced with a threat such as state intervention or sanctions for low performance (Daly, 2009). Other relational aspects of leadership within a system that are key to school improvement include consistency of expectations for central office leaders and principals (Honig, 2013), validation of contribution and expertise (Honig, 2008), self-efficacy and job satisfaction (Leithwood, 2007), and working and social conditions within the district and external environment (Leithwood, 2007; Mascal & Leithwood, 2010). Further research suggests that the underlying social network structure of the system may facilitate or impede school-level improvement efforts (Daly & Finnigan, 2011; Finnigan & Daly, 2012; Finnigan, Daly, & Che, 2013; Johnson & Chrispeels, 2010).

Theoretical Framework

According to Daly (2010), “social network research suggests that informal webs of relationships are often the chief determinants of how well and quickly change efforts take hold, diffuse, and sustain” (p. 2). Instead of viewing change as a rational, linear process, social network theory views change through a relational perspective, acknowledging the role that each individual, or actor, plays in the process and recognizing that the interconnectedness, or ties, between actors may influence the success of the proposed change (Daly, 2010). Through the foundational concept of social capital, social network theory posits that the position of the actor within the network, the types of resources available within the network, and the strength of ties between the actors influences organizational performance and outcomes (Lin, 1999).

Central to this study are the ties between actors that result in what Lin (1999) refers to as expressive action or outcomes. In social network theory, Lin (2001) argues, there are two types of outcomes

in networks, instrumental and expressive. Instrumental networks refer to relationships used to access resources and to technical relationships between actors in which material return or social position is received from the network (Lin, 1999; 2001). Expressive networks, however, are relationships built to preserve resources (Lin, 1999). Expressive networks result in actions that contribute to an actor's physical or mental well-being or overall satisfaction (Lin, 2001). These types of relationships encompass sharing of feelings, expressing stressors, and/or building trust (Finnigan & Daly, 2012). Social network theory proposes that actors within a system may be positioned in both instrumental and expressive networks, and these networks may work to reinforce or complement each other (Lin, 1999). Within the field of education, research studies suggests relationships focused on expressive outcomes, specifically socioemotional support and trust, cultivate a climate of innovation (Moolenaar & Slegers, 2010); improve administrator and classroom teacher collegiality (Tschannen-Moran & Gareis, 2015), increase collaboration (Tschannen-Moran, 2000), and influence the change process (Daly & Chrispeels, 2008; Liou, Daly, Brown & Fresno, 2015).

Social network analysis (SNA) provides a conceptual model by which to visualize and analyze the interactions within a network (Borgatti & Ofem, 2010; Scott, 2000; Wasserman & Faust, 1994). The actors and their relationships within the network are represented by a series nodes and ties that can be used to identify the role of an individual actor within a network, or more importantly, identify the affect nodes and ties have on one another within the larger system (Borgatti & Ofem, 2010). Information related to actors and ties can also be used to quantify relationships within a network. Social network analysis can be used to identify the cohesion of the network, the presence of mutual relationships, and the position of actors (Borgatti & Ofem, 2010; Scott, 2000). Together, the measures of density, reciprocity, and centrality can explain the opportunity and constraint within the network (Borgatti & Ofem, 2010).

Methods

In this study, qualitative case study design that drew on the methodological approach of social network analysis (SNA) was selected to explore the relationships among elementary principals and district central office staff in a large urban district in the Midwest.

Context

Johnson Public Schools (JPS) is an urban school district in the Midwest. Like many urban school districts, JPS is located in an urban area that saw periods of decline followed by periods of reinvestment that have displaced many longtime residents, further segregated sections of the city by socioeconomic status, and increased attention on and community accountability for the educational options available to students within the district. Currently, JPS serves a student population of over 30,000 in 72 school sites. Of these students, 89% are eligible for free and reduced lunch. The student population is diverse: 52% of students identify as Hispanic, 24% African American, 15% Caucasian, 3% American Indian, and 6% as Other or Multiple Races.

This research study focused on the elementary schools within JPS. There are 56 elementary sites in the district, and the sites vary in type, size, and academic performance. Within the elementary schools, population size varies from 200 students to 1100 students, and free and reduced lunch rate varies from 42% to 100%. Elementary schools are located across the district and situated in ethnically and socioeconomically diverse community populations. These sites also vary in academic performance. According to the State's comprehensive report card, in 2015-2016, over 70% of JPS elementary schools earned a D or an F. During this school year, the majority of elementary schools in JPS were in some stage of state oversight or intervention due to academic performance.

Data Collection

The data for the study were collected from multiple sources including SNA name generator surveys, interviews, observations, and document review.

Surveys

I administered social network surveys to 56 site principals and 35 district central office (DCO) staff directly responsible for elementary schools. The survey was a free-recall survey on which participants identified relationships and were not bound to individuals within a defined system or limited in number of answers (Scott, 2000). Survey questions were developed using the research questions as a guide and founded in existing literature on social network analysis in educational settings (Daly & Finnigan, 2009; Daly & Finnigan, 2012; Finnigan & Daly, 2012; Oh, Chung, & Labianca, 2004.). On the survey, participants were asked to identify relationships with colleagues on two questions related to expressive ties. DCO staff were asked to identify relationships with other DCO staff members and school site principals, and principals were asked to identify relationships with other principals and DCO staff. The following survey questions were used to elicit responses related to expressive ties:

1. For the current school year, with whom do you discuss personal issues or issues not related to work?
2. For the current school year, with whom do you spend time with outside the school setting?

In question two, “outside the school setting” was operationally defined as formal or informal events occurring inside or outside of the school day for which the purpose of the event was to develop personal relationships, to socialize, or to engage in an activity not directly related to work. Of the 91 surveys administered, 22 were returned for a response rate of approximately 24%.

Interviews

For this study, I conducted semi-structured interviews with five DCO staff and five principals for a total of 10 interviews. Interview questions were focused on types of relationships within the school district, interactions between DCO staff and principals, and opportunities to develop or enhance expressive relationships related to personal friendships, trust, venting, and socialization. Each interview lasted approximately 60 minutes and was digitally recorded. Follow-up interviews were conducted, as necessary, to clarify information or for member checking of transcripts.

Interview participants were selected based on selected criteria. DCO interview participants were recruited based on position within the DCO and job description and responsibilities. Principals of both high and low performing schools were recruited for the study. Principals were selected based on location of school, academic performance of school, and years of experience as an administrator in the district.

Observations

Multiple observations were conducted as part of this study. Each observation lasted between one hour and one full day (approximately seven hours). Observations were conducted at Board of Education meetings, district level meetings, principal meetings hosted by the DCO, in school buildings during the regular school day, and at events hosted by the district focused on celebration or socialization. Handwritten field notes were taken at each observation and included hand drawn diagrams of interactions, notes on interactions and relationships, and descriptions of the observable event. Observation provided perspective on relationships between DCO staff and principals, implementation of reform efforts, and enhanced understanding of the research site context.

Documents

In addition to interviews and observations, documents related to the study were reviewed and analyzed. Documents collected included district planning documents, principal meeting agendas, school planning documents, miscellaneous district and school meeting agendas, district level communications to school sites, and academic performance reports. These data provided another layer of perspective on relationships and interactions and were used in triangulation of data.

Data Analysis

Data analysis was an ongoing process during which analysis of the SNA surveys and analysis of qualitative data overlapped chronologically and occurred simultaneously with data collection.

Surveys

Survey data was entered into UCINET to create six matrices representing the relationships among district office staff and elementary principals (Borgatti, Everett, & Freeman, 2002). NetDraw was then used to create visual representations, or sociograms, for each matrix (Borgatti, 2002). Because the survey response rate of 24% was lower than necessary to establish a representation of a complete network, the resulting sociograms were used to identify additional interview participants, guide interview questions, and as a qualitative artifact, providing triangulating data for the interviews, observations, and documents.

Qualitative data

Qualitative data of interview, observation, and document review were analyzed using an iterative coding process. Data were first transcribed and organized into an accessible case study database (Yin, 2009). The data were initially read for familiarization with the data. In subsequent reads of the data, data were coded for both pre-set and emerging codes. Pre-set codes were developed from the theoretical framework of the study. Including emerging codes ensured categories and recurring patterns in the data were not excluded in the analysis. Codes were then analyzed for relationships with each other and organized into broader themes. Themes were tested against other qualitative data sets and the social network analysis sociograms. Analysis continued until saturation. Trustworthiness was established through techniques of triangulation, peer debriefing, and member checking.

Findings

Analysis of the data revealed several major findings for this study. In this section, I discuss these findings. First, I address the results of the social network analysis survey. Then, I discuss the findings that emerged through qualitative data analysis and provide insight on participant perspectives of expressive relationships in JPS. Finally, I discuss the themes that emerged as elements of the network that may support or impede the implementation of reform efforts.

The Social Network Structure of Johnson Public Schools

Findings of this study indicate sparse expressive ties between the DCO staff and principals in JPS. Figures 1-6 provide sociograms of these relationships as reported on the social network analysis survey. In the sociograms, each symbol, or node, represents an actor, or person, within the network. Square nodes represent DCO Staff, circle nodes represent principals of lower performing schools, and triangle nodes represent principals of higher performing schools. The lines connecting the nodes are called ties, and the ties represent a relationship between actors. The arrows at the end of the ties indicate the direction of the relationship. One arrow indicates a one-way relationship, or

an asymmetric relationship. A tie with an arrow on both ends indicates a two-way, or reciprocal, relationship.

While the sociograms provide a visual representation of the reported expressive relationships in this study, the low survey response rate of 24% limits the validity of the sociograms to generalization of the entire district or possible network. Analysis of other qualitative data including interviews, observations, and documents provided deeper understanding of the expressive relationships among district central office staff and principals. Below, I provide more description of Figures 1-6 and the findings related to expressive relationships and the social network of Johnson Public Schools.

Relationships between DCO staff

Figures 1 and 2 represent the expressive relationships reported between DCO staff. What is evident from Figures 1 and 2 is there were few expressive relationships reported between DCO staff. Overall, there are approximately 372 employees in JPS employed at the DCO level that were eligible to be named on the free choice survey. Of those DCO staff who completed a survey, only 75% identified at least one other person on the DCO staff with which they discussed personal issues or issues not related to work (Figure 1). Of these, 50% selected only one other person from the DCO. Figure 2 illustrates that only 50% of the DCO staff who completed the survey identified at least one other person in the DCO with which they interact outside of work setting.

Based on the survey responses, I found a low density of relationships (the number of relationships reported out of the number of possible relationships) and few instances of reciprocity (two-way relationships) among those who answered the survey. Additionally, networks were fragmented, closed networks. These networks did not include bridging ties to connect different parts of the networks. I also found that of the relationships reported in both Figure 1 and Figure 2, all relationships reported occurred between members of the same work department. This suggests a working environment in which individuals within departments in this DCO are working in “silos.” These silos indicate a likelihood that actors within these networks work closely within the department as opposed to working with actors from across the district.

DCO staff members interviewed also described their expressive relationships in a departmental nature. Interview participants reported few formal opportunities to interact socially with other members of the DCO. Of the events that were reported, these occurred within departments. These events included going to lunch together during the week, hosting departmental potluck lunches for birthdays or holidays, or informally having conversations with staff members whose offices were in close proximity. D0314 explained the development of her relationships with a colleague like this, “I don’t spend a lot of time with people that I work with except for one person. From time to time we have dinner, and that’s only because we are used to being next door, and we converse.”

It was noted through document review and observation that even when the district planned district-wide events, the agendas were usually planned very tightly with no time for networking and usually included a “working lunch” which prevented colleagues from interacting during that hour. As D0308 stated of the district providing formal opportunities for DCO members to work with or interact with individuals across work departments or across the district, “I wouldn’t say it was something the district does.”

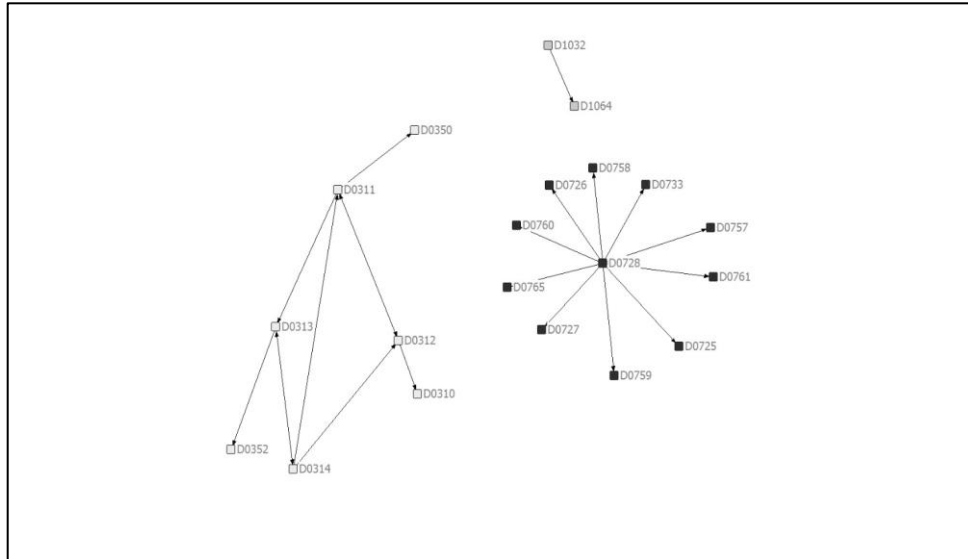


Figure 1. Sociogram representing relationships between district central office personnel in terms of discussion of personal issues or issues not related to work.

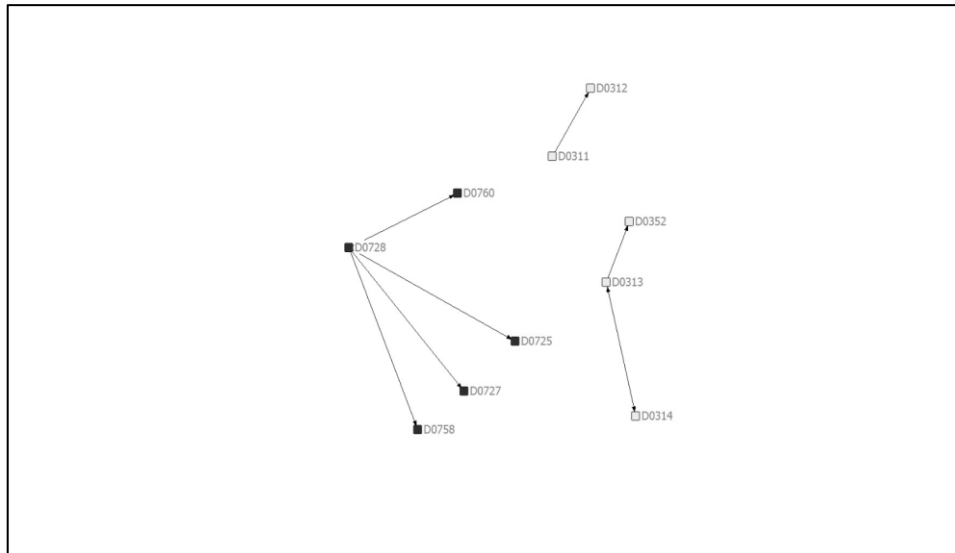


Figure 2. Sociogram representing relationships between district central office employees in terms of spending time together outside the work setting.

Relationships between principals

Figures 3 and 4 represent the expressive ties or relationships between elementary principals in this district. In this district, there are 56 elementary principals who were eligible to be named on the survey for each question. Of the principals who completed a survey, 64% of survey respondents listed a fellow principal with which they discussed issues not related to work (Figure 1), and 36% listed a fellow principal with which they spent time with outside of work (Figure 2). It is evident

from these sociograms that networks related to expressive ties are sparse. The network, as reported by survey participants, consists of several fragmented networks, most of which are dyads or triads (relationships between two or three actors) and are unreciprocated.

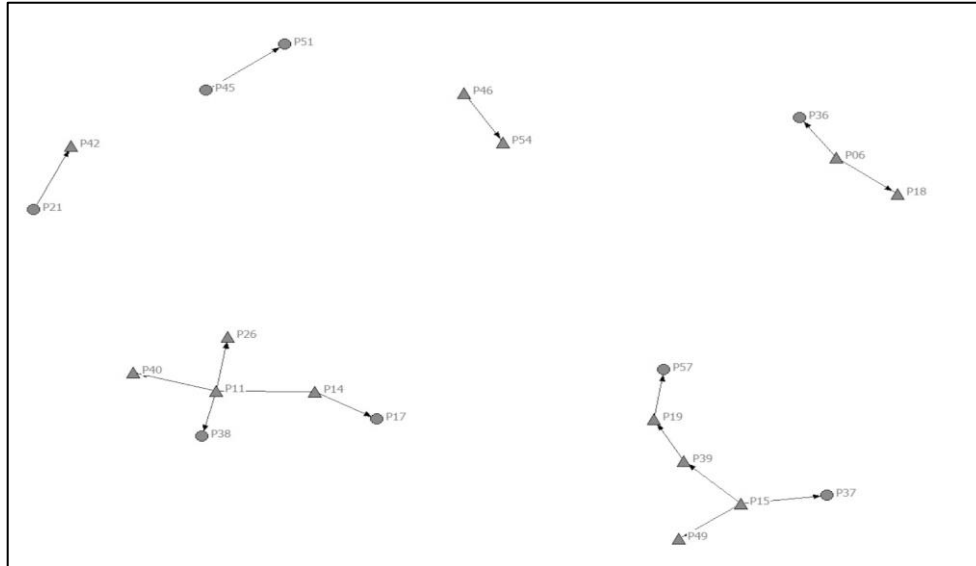


Figure 3. Sociogram representing relationships between elementary principals in terms of discussing personal issues or issues not related to work. Triangle nodes represent principals of high performing schools and round nodes represent principals of low performing schools.

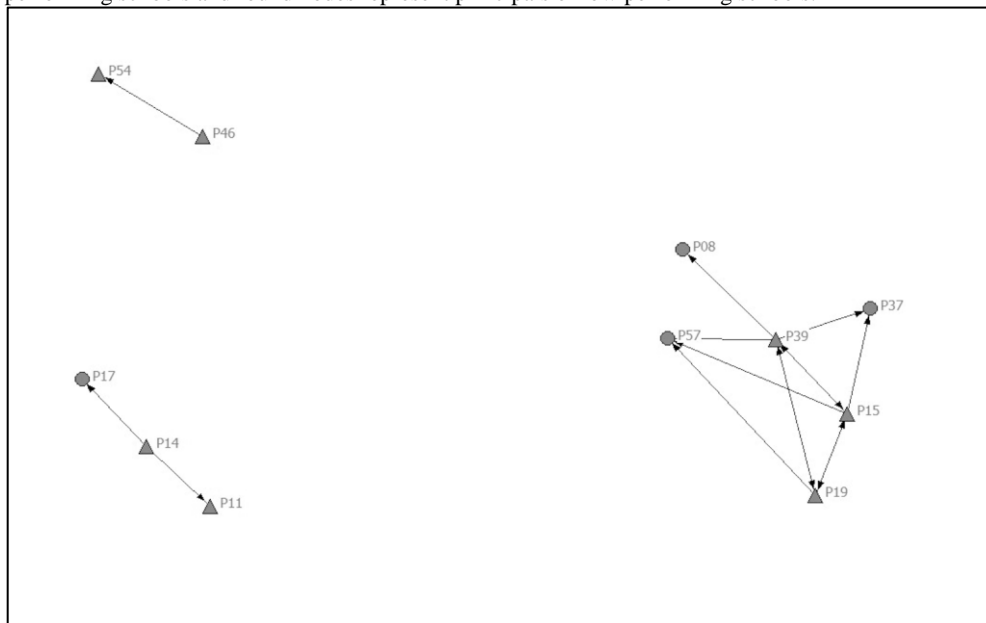


Figure 4. Sociogram representing relationships between elementary principals in terms of spending time together outside of work. Triangle nodes represent principals of high performing schools and round nodes represent principals of low performing schools.

These data suggest, first, that 36% principals who completed a survey could not identify at least one colleague with which they can discuss issues not related to work, and 64% could not list one colleague with which they spend time outside of work. Those that did identify relationships, named only one or two fellow principals with which they share expressive relationships. The data indicate that many principals within this district are operating in isolation. Those principals that did complete the survey reported small networks, groups of two to three, and these groups are isolated from other principal groups within the district.

The small network at the bottom right of the sociogram was identified as an outlier for this sociogram. The network consists of a triad of reciprocal relationships (P15, P39, and P19), and P39 connects the triad to three principals of lower performing schools. Follow up interviews revealed that P15, P39, and P19 belong to a group of principals who meet weekly to play a group card game. This card game is organized by a group of principals who retired from the district, but worked closely with P15, P39, and P19 while still employed. P15, P39, and P19 also reported higher rates of social interaction with these retired principals than with principals currently working within the district. These weekly social gatherings and history of social interaction explain the degree of reciprocity in the triad as well as the anomaly in the data.

Beyond this small network, principals interviewed for the study described a lack of collegial relationships within the principals in the district. The interview participants reported that most interactions between principals occurred informally as casual conversations in the minutes before and after meetings. Although principals did report district-wide principal meetings as possible avenues for social interaction, principals also reported that when these meetings occurred, principals often found themselves sitting and listening to information for the duration of the meeting or training. A review of meeting agendas for the principals meetings revealed that the longest period of time allowed for principal interaction was 30 minutes, and this interaction was structured around presentation content.

Principals did report one specific informal opportunity for developing personal relationships or social interactions. Principals interviewed indicated that on the days of principal meetings, some principals would informally plan a lunch outing after the meeting. However, it was also reported that these were usually attended by small numbers of principals who also had assistant principals assigned in their buildings. Time constraints or lack of administrative leadership at the school site prevented the majority of principals from attending. According to P15, "sometimes we feel like we can go to [lunch]. Sometimes we feel the pressure to get back to our buildings." During interviews, all principals interviewed voiced frustration at the perceived lack of opportunity to not only share technical or professional information with colleagues, but also participate in social opportunities.

As P14 explained,

[The district does] not directly foster [social interaction]. So, when we have elementary principal meetings, I'll usually show up early, and after, we'll usually go out to eat as a group. Does [the district] set aside time for us to just to kinda like network? No, they don't do that. And we've actually suggested that a lot. We've actually suggested that a lot.

It is important to note that data suggest that, in this district, expressive relationships between principals do not appear to be significantly influenced by school performance. Principals of high performing and low performing schools appear to seek each other out for expressive relationships at approximately the same rate. Instead, interviews revealed that reported expressive relationships were more often developed based on historical work experience or years of experience with the district.

Relationships between DCO staff and principals

Figures 5 and 6 represent the expressive relationships reported between DCO staff and principals in this district. DCO staff were asked to list principals with which they share personal information or spend time outside of work, and principals were asked to list DCO staff with which they share personal information or spend time outside of work. Through my analysis of Figures 5 and 6, it is evident that sparse expressive relationships between the levels of this school district exist.

In terms of discussing personal issues or issues not related to work (Figure 5), few survey participants provided names of those which they have a relationship. Only two of the principals who returned surveys and only three of the DCO staff who returned surveys listed any names for Question 1. Of those participants that did return surveys, the networks represented are small, disconnected, and lack reciprocity. In Figure 5, it is also evident that of the DCO staff who completed a survey, principals of high performing schools are sought after more often for sharing personal issues.

In terms of social interaction outside of work, the reported network consists of only one triad. No principals surveyed listed any DCO staff as relationships for this question, and only one DCO staff member listed principals. It is also important to note that this particular DCO employee named only principals of high performing schools. The data indicate that, in this district, as reported by survey participants, there are few relationships between members of the DCO and the site principals in terms of interaction outside of work. These data also show that expressive relationships within this district, as reported by survey participants, are internally focused, DCO staff members reported social relationships with other DCO staff members (Figure 2), and principals reported social relationships with other principals (Figure 4), at a higher rate than relationships between DCO staff members and principals were reported (Figure 6).

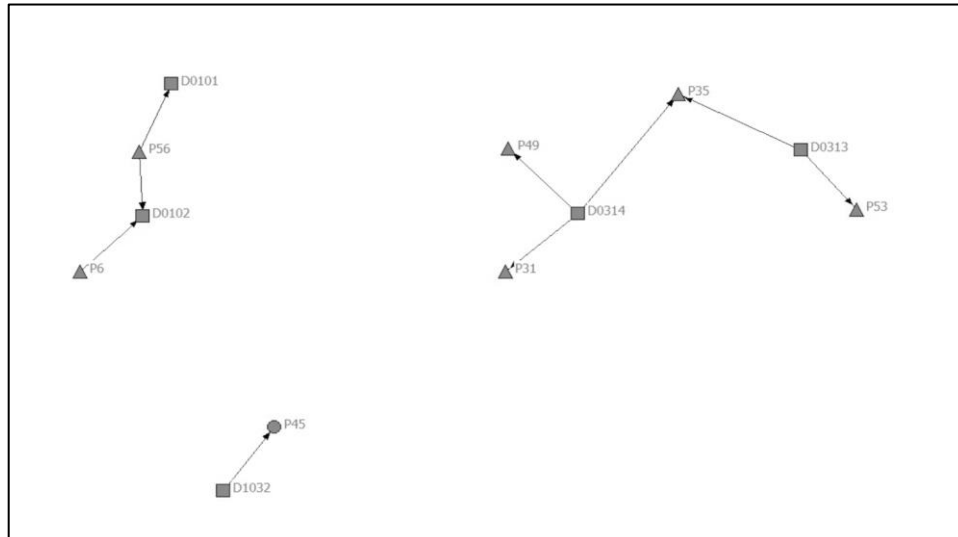


Figure 5. Sociogram representing district central office members and elementary principals ties related to non-work related issues. Square nodes represent DCO members, triangle nodes represent principals of high performing schools, and round nodes represent principals of low performing schools.

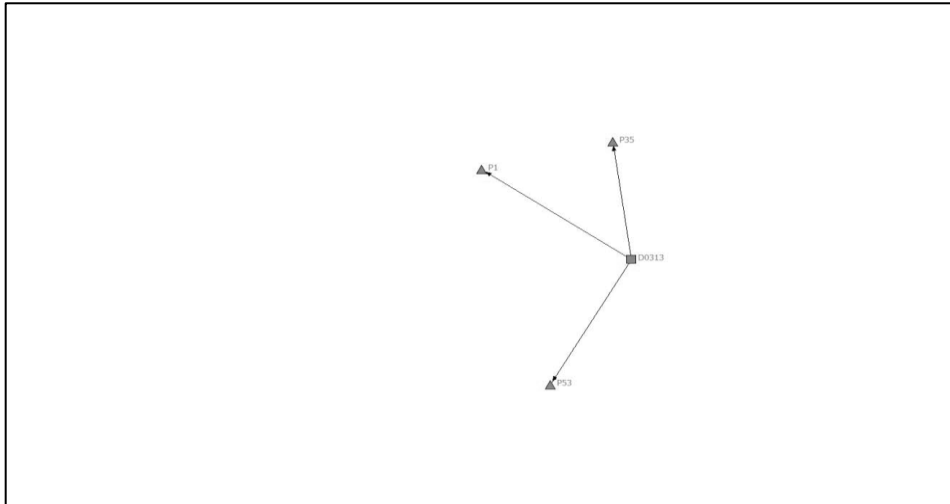


Figure 6. Sociogram representing district central office members and elementary principals relationships related to social interaction outside work setting. Square nodes represent DCO members, triangle nodes represent principals of high performing schools, and round nodes represent principals of low performing schools.

Expressive Relationships and School Reform Efforts

Through analysis of the data, two major themes emerged as elements of the social network structure in Johnson Public Schools that may support or impede school reform efforts in the district. In this section, I will discuss these themes of isolation and technical relationships.

Isolation

Triangulation of data suggests that actors within the social network of JPS are often operating in isolation. Figures 1-6 represent the social network of JPS in terms of expressive relationships related to discussing personal issues or non-work related issues and social interaction. Figures 1-6 show that despite the high number of school staff at the district and school (372 DCO staff, 56 elementary principals) those DCO staff and principals that returned surveys either named few colleagues resulting in small, fragmented networks, or did not name any colleagues with which they share expressive relationships.

Interview data indicated that this feeling of isolation is larger than expressive relationships. During interviews, participants were asked about other relationships with colleagues regarding work-related practices, communication, and professional development. The theme of isolation was pervasive in these descriptions as well at all levels of the system. One DCO member noted this about district communication:

I usually find out through the grapevine. What's really interesting is I found out more from my schools about what's going on in the district than I find out from the district itself...[Communication in the district] is kind of a trickle down, and it does not always trickle down the way it's supposed to.

Principals shared this feeling of lack of communication across the district, and expressed a challenge of self-sufficiency in their position. Principal P45 Stated, "If there are any [supports or

programs from the district], I don't know what they are. I find everything for myself. I would say any attempts by [the district] are more informal.”

In relation to the finding of isolation, was the finding that principals perceived a sense of distrust or fear that inhibited them from developing relationships with DCO staff. P14 shared:

I will say this, when I first started in the district, it was extremely, you can underline that, circle it, and highlight it, and I'm dead serious about this, it was extremely, good ol' boy. There were very specific cliques at the downtown office and if you were in with the clique you would get [resources].

In follow up interviews regarding the lack of relationships, one principal stated, “I just don't do that so I'm probably the worst person to ask about that.” P15, a principal with a comparatively high number of reported ties in the sociograms, shared of her perceptions of DCO/principal relationships, “And probably the only I reason I do [have relationships] is I'm not afraid to just call and ask questions. Some people, I think are afraid, to look like they don't know what is going on. I'm not that person.” Interestingly, despite the finding of distrust and fear, both the principals, as mentioned earlier in the study, and DCO staff interviewed expressed the desire for more interaction with colleagues at all levels. P14 shared, “It would be nice if we had even one meeting of the year, just to pull everyone together.”

As this district attempts efforts to meet state accountability standards and to implement the new district-wide reforms, the isolation expressed by DCO staff and principals regarding their work environment may impede the district's ability to substantially reform the district. Isolated networks often indicate weak communication (Daly & Finnigan, 2009) and often limit necessary resources for reform from reaching all parts of the network (Daly & Finnigan, 2011). Isolation at the DCO level, even in district such as JPS with more connected networked work departments, often impedes the sharing of innovations or new ideas across the system (Moolenaar & Slegers, 2010). Additionally, feelings of isolation may constrain the ability of individuals within the social network to focus on the needs and goals of the larger system and buy-in to district-wide reform efforts (Sanders, 2014). However, the apparent eagerness and readiness of DCO staff and principals for increased opportunities to develop networks could be of advantage to the district, and should be addressed.

Technical Relationships

Although there are, comparatively, a higher reported number of expressive ties within work departments in the DCO than at or between other levels within JPS, Figures 1-6 indicate few expressive ties exist within the district. Qualitative data indicate that this is not anomalous to the sociograms. Interviews, observations, and document review indicated a district-wide focus on technical information in regards to relationship building.

During interviews, DCO staff were asked about formal and informal opportunities within the district for district staff at all levels to build personal relationships or interact socially. DCO staff described relationships at their own level (district-level) as breakfasts, celebrations, and after work social events limited to members of the same work departments. This finding is consistent with the sociograms in Figures 1 and 2. However, when the DCO staff were asked about opportunities for relationship building with principals or between principals, DCO staff most often described the opportunities as professional events and activities focused on technical information. D0102 stated,

We encourage, [interaction] more during the school day. We encourage them to do peer walk-throughs or observations, and that's during the school day...I have also grouped my principals together to mentor some of the new principals that are coming aboard.

In addition, DCO staff also reported that email newsletters and district-wide principal meetings were typically the medium used to reach out to principals and to encourage interaction. Review of newsletters revealed mainly communication of technical information such as testing schedules, calendar updates, and operational reminders related to budget, human relations, or maintenance. Principal meetings agendas consisted of numerous district level departmental reports provided to the principals and technical review of federal or state requirements on topics such as Title I or state testing. Ironically, principals reported that principals meetings were ineffective, one principal referred to them as “sit and get” and that email was the least effective way to communicate. P14 summed up the principals’ perspective on emails as such,

We get like 50 emails a day. One time I timed myself, I averaged, if I was actually to answer every email...it takes an average of 1 and a half to 2 hours to answer every email you get in a day, minimum. And that’s assuming you take approximately two minutes per email, and occasionally, you run into those emails where you actually have to take like 30 minutes...the amount of emails we get is a lot.

While the sharing of technical information is critical in school districts, particularly in districts under pressure to improve academic outcomes, continued one-way communication of information may constrain the development of networks necessary for school reform. One-way or asymmetrical ties from the DCO to the principals limit meaningful two-way communication and inhibit feedback loops necessary for system-wide learning (Finnigan & Daly, 2012). Focusing on technical information at the expense of expressive ties may also be an indicator of a negative climate (Finnigan & Daly, 2012) and result in a lack of trust, which research has shown to be a predictor of the leadership necessary to improve student outcomes (Daly & Chrispeels, 2008). The findings suggest that limited expressive relationships and a perception of a negative climate (Finnigan & Daly, 2010) which discourages, or at the least does not intentionally support, connectedness may contribute to the sense of isolation and may impede instrumental ties through which the knowledge, information, and resources necessary for change are shared.

Discussion

The purpose of this qualitative case study is to understand the social structures, specifically, the underlying social network related to expressive relationships, of an urban school district attempting to implement school reforms. This findings of this study provide insights into the underlying expressive relationships in a district enacting school reforms to meet accountability targets. In this section, I discuss the findings through the lens of social network theory and situate them in the relevant literature.

According to social network theory, relationships matter (Daly, 2010). Organizational change relies on relationships within a social network for accessing and mobilizing resources, ideas, and knowledge across a system (Lin, 1999). The position of actors, number and type of ties between actors, the bridging or boundary spanning between actors, and the density and cohesion of a network are all integral to how critical information is shared and eventually embedded in the system (Lin, 1999). In JPS, the social networks appear fragmented, isolated, and consist of few bridging ties. In terms of school reform efforts in JPS, this network structure may constrain principals’ access to knowledge and resources necessary for adoption and implementation of efforts. The fragmented networks indicate that information is protected in small groups and not often shared across levels of the system. The networks also suggest that a number of actors, including DCO staff and principals, may be excluded from key information necessary for the change process.

This study drew specifically from the concept of social capital and expressive and instrumental ties, which are foundational to social network theory (Lin, 1999). According to Lin (1999), expressive ties “preserve or maintain resources” (p. 34) and reciprocally effect instrumental actions.

Expressive relationships are key to the health of the individual and the system, contributing to the physical and mental well-being and satisfaction of the actors (Lin, 1999). In JPS, there are few reported expressive ties at any level of the system. Both principals and DCO staff report working in isolation either in work departments or in position. In turn, these individuals often seek out their own resources, maintaining them internally. Without the necessary density or bridging ties, these resources are often not shared outside of a small group. Additionally, the intensive focus on technical relationships, whether due to leadership or the increasing demands of accountability, further increases pressure on principals to improve causing them to believe there is little time to interact with others around topics other than technical information. This belief appears to further isolate principals and may contribute to a diminished sense of job satisfaction and an increase in fear, especially a fear of appearing incompetent. Furthermore, lack of attention to building expressive relationship may also erode trust between levels of the system which research has shown to affect an individual's willingness to change (Daly & Chrispeels, 2010). The findings suggest that without intentional action by the system to improve expressive relationships, instrumental relationships and the knowledge, resources, and information shared through them may not be sustained and thus system-wide reform is unlikely.

Implications of the Study

Practice

In terms of practice, the findings of this study suggest that as districts create strategies to implement school reforms or to enact transformational change, attention should be paid to the social networks within the system. Districts should leverage the existing social networks, identifying key actors, to communicate and share critical information. Districts should also develop intentional structures and processes that encourage the development of relationships at all levels of the system, particularly for schools that are under increased pressure to meet the state's accountability standards. Districts can build these relationships by facilitating or supporting ties between site principals, between DCO work departments, and between the DCO staff and principals. Additionally, Honig (2013) and other researchers have written extensively about transforming the work of the central office away from a more managerial role to one of assistive relationships. This transformation both supports the development of relationships and provides the necessary two-way, or reciprocal, relationships for network growth and system change. To sustain change, this study suggests that attention should also be paid to creating opportunities for meaningful expressive relationships between all levels of the system.

This study also suggests strategies for practice for leadership preparation programs at the university level. As indicated by the findings in this study, there is a need for educational leaders at all levels to consider relationships as integral to school improvement and for leaders to adopt what Shaked & Schechter (2017) refer to as "holistic school leadership" (p. 47). Holistic school leadership is not merely a tool, but an approach to leading a school in which leaders apply systems thinking concepts and principles flexibly to address a range of issues from complex problems to daily tasks (Shaked & Schechter, 2017).

Holistic school leaders see the district and school as inseparable from the community, seek out multiple causes for one challenge, and perceive themselves as part of a larger organization instead of isolated within one position (Shaked & Schechter, 2017). Although the ELCC standards for leadership preparation stress building relationships with stakeholders and leveraging resources for improvement, systems thinking is often taught in preparation programs, if at all, as a means of addressing school reform or solving critical problems (Shaked & Schechter, 2017). This study suggests that more attention is needed in providing future leaders not only preparation in building and sustaining relationships, but understanding systems thinking as a philosophy instead of a program or tool to implement for improvement.

Research

This study indicates the need for future research in this area. Research is needed, either in this district or similar districts, with a higher return rate of social network analysis surveys for a more complete picture of district-wide networks. Research should also include analysis of multi-plex networks, or the positionality of actors within different types of networks (e.g. expressive and instrumental) to determine the importance of ties in educational reform. As this study also focused on a district implementing reforms, a future study could measure diffusion of the reform efforts and create a model of diffusion based on network ties. Additionally, much of the research on social networks in education has been done in large, urban districts. Research is needed on how social network theory or social network analysis influences change in varied contexts including small, rural districts and private or charter schools.

Limitations

This study presents several limitations that should be addressed. First, the study is one qualitative case study conducted in one urban school district in the Midwest. For this reason, findings cannot be generalized across a larger population. Additionally, this study presents its findings based on a small percentage of returned social network surveys and interviews with a relatively small number of participants compared to district size. The 24% return rate on surveys did not provide a complete picture of the expressive relationships within the district. Though findings were triangulated with other qualitative data, the size and demographics of the population included in the study could have skewed the findings.

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