The Effects of Social Capital Levels in Elementary Schools on Organizational Information Sharing

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Abstract
This study aims to assess the effects of social capital levels at elementary schools on organizational information sharing as reported by teachers. Participants were 267 teachers selected randomly from 16 elementary schools; schools also selected randomly among 42 elementary schools located in the city center of Batman. The data were analyzed by using a regression model and correlation analysis on the total scores obtained by using mean scores from the "Scale for Social Capital at Schools" and "Scale for Information Sharing at Schools." The findings showed that a statistically meaningful relationship existed between all subdimensions of social capital and organizational information sharing. The correlation coefficients revealed that the highest correlation existed between the trust dimension of social capital and organizational information sharing. These results indicate that the information sharing levels at schools were, overall, strongly predicted by social capital and that the regression model was highly supported by the data set at hand. Considering these findings, it is possible to argue that school administrators can make significant use of social capital in improving information sharing levels within their schools.

Key Words
Social Capital at Schools, Organizational Information Sharing, Social Capital and Information Sharing, Trust.

The types of capital mentioned in contemporary social sciences literature have become rather diverse. In addition to Marx's classical definition of capital, many other types such as intellectual (Stewart, 1997), human (Becker, 1985), cultural (Bourdieu, 1986) and symbolic (Bourdieu, 1989) capital have been analyzed in the literature. The concept of social capital, coined by Hanifan in 1916 while evaluating the school system in West Virginia, has become another popular topic of study particularly after the 1980's (Woolcock & Nayar, 2000). Since it is based on human relations, social capital strengthens cooperation between individuals, creates synergy, and plays an important functional role in many organizations (Fukuyama, 2005; Putnam, 2000).

Social capital is based on individual relations that emerge as a result of and are shaped by group membership (Bourdieu, 1986). Some negative effects of social capital, which is, in general, regarded as a positive potential in literature, are also mentioned. According to Bourdie (1986) the owned connections can provide the maintenance of the individuals' privileged status and may lead to a more privileged position via social nets and connections even if the humanistic capital is low. Similarly, Putnam (2000) states that in some groups where social capi-
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Previous studies on social capital have concluded that it has critical functions in organizational structures formed by people working together. It is possible to summarize these results as organizational effectiveness (Fukuyama, 2005), work fertility (Leana & Buren, 1999; Sabatini, 2005), trust, common vision, dependence, stability, and team spirit (Cohen & Prusak, 2001). Requena (2002) expresses social capital-in terms of its function- through oil metaphor in organizational courses, as it has a vital importance in the processing of the machine. To him, it is the social capital that carries out the function of oil in organizational processes. In these structures,
social capital brings people together around a shared goal or vision with the help of trust, social networks, organizational values and norms, social interaction, active participation, elements of organizational loyalty. At schools, as educational institutions, where human relationships determine the organizational efficiency, (Creemers & Reezigt, 1997) it is possible to conclude that a high level of social capital will have great benefits. Positive outcomes include establishing links between individuals through social networks and contacts, promoting a strong sense of reciprocity and teamwork (Woolcock, 2001), and ensuring efficiency in cooperative tasks owing to an elevated sense of trust. Significant positive outcomes are achieved by managers and teachers who deploy main elements of social capital, such as trust, social networks and contacts, values and norms, social interaction and active participation, and high group and organizational loyalty levels (Fukuyama, 2005; Putnam, 1993).

The research that have been carried out revealed that social capital has a lot to do with the strengthening of cooperation, trust, team spirit and common vision among teachers at schools (Bryk & Schneider, 2002; Israel, Beulieu, & Hartless, 2001). Putnam (2000) states that there is a strong association between educational achievement and social capital levels, high social capital at schools increase the efficiency and effectiveness of education; and social capital levels in the society improve with better quality education. The relationships of teachers with one another, with the management and with students offer important clues about social capital levels at schools. These relationships determine to a large extent whether schools have effective or ineffective organizational functions (Ewington, 2003). The causal relationship between education and social capital inevitably puts forward the question of whether schools use this potential effectively to meet their goals. Effective use of social capital is mandatory for effective schools and a high quality educational environment (Ekinci, 2010).

Lin (2006) emphasized that interpersonal trust, organizational support, organizational belonging and group structure are important elements in facilitating information sharing in organizational processes. Furthermore, Barutçugil (2002) stated that organizational information sharing is significantly increased by people's emotional readiness for cooperative work and the existing level of trust in the organization.

Argyris (1993) defines knowledge as the capacity that humans and organizations need to effectively take actions to meet their aims. Level of knowledge are critical to organizational life and are largely determined by information sharing between employees and units (Gupta & Govindarajan, 2000; Nonaka, 1994). Information is important to goal achievement, but it only becomes valuable when shared in organizational processes. Yang and Chen (2007) mention the information sharing in terms of cultural, structural, humanistic and technical dimensions. However, open and effective sharing is not easy (Bryant, 2005). Information sharing is defined as the transfer or dissemination of information from a person, group or organization to another (Yazici, 2001) and it requires active links between individuals, groups and organizations, sincere relationships and interactions, and a high level of trust, belonging and loyalty. Social capital fulfills an important function in this process as a meaningful combination of the elements of information sharing. However, there are not enough studies on social capital-information sharing which are thought to have a positive effect on information sharing in organizations (Widen-Wulff & Ginman, 2004). Social capital is able to bring cooperation, sincerity and openness to human relations. The elements of social capital play an important role in the elimination of obstacles before information sharing, and have critical value at schools where human relations can create much potential. Therefore, it is important to assess the degree to which social capital levels among elementary teachers at schools affect information sharing. This study was conducted to identify the effects of social capital levels on information sharing at elementary schools, from the teacher perspective.

**Method**

This study attempts to identify the effects of social capital levels at elementary schools on organizational information sharing by using a literature survey and teacher views. The study has adopted the relational survey model, which aims to determine the existence and/or degree of parallel change between two or more variables (Karasar, 1995).

**Population and Sample**

The general population of the study comprised 2,156 teachers who were working at the 42 elementary schools located in the center of Batman (in Turkey) during the 2010 – 2011 school year. The sample however, included 310 teachers who were working at the 16 elementary schools selected ran-
domly from among the population. As the population standard deviation is not known when the sample size is calculated, it has been taken from an early study (Ekinci, 2008) and $s$ was estimated as 1. 95% trust level and 0.1 error margin were taken into account. In this state, it has been decided to reach an enough sample size (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2008). After eliminating incomplete surveys, a total of 267 forms were processed. The participants included 166 male and 101 female teachers.

Data Collection Instruments

Scale for Social Capital: Developed by Ekinci (2008), to assess social capital levels at schools, the 62-item "Scale for Social Capital at Schools" was used in this study. This is a 5-point Likert scale; a higher score indicates a higher level of social capital level. In the reliability analysis conducted separately for this study, the Cronbach Alpha reliability coefficient of the scale appeared to be 0.97. The factor analysis showed the Kaiser-Mayer-Olkin (KMO) value to be 0.857 and Bartlett test to be meaningful. The scale was concluded to have 5 factors (Organizational Loyalty, Communication-Social Interaction, Cooperation-Social Networks and Participation, Trust, Tolerance for Differences and Norm Sharing), which explained 69.95% of the total variance in the instrument. As it is known, if the variant explained in multi-factoral scale is 2/3 of the total variant factor analysis is regarded as satisfactory (Büyüköztürk, 2003).

Organizational Information Sharing at Schools: Developed by the researcher to assess the effects of social capital levels at schools on organizational information sharing, the 20-item "Scale for Organizational Information Sharing at Schools" was used in the study. The Cronbach Alpha reliability coefficient of the scale was 0.95. The factor analysis showed KMO value as 0.922 and Bartlett test as meaningful. The instrument had one single factor that explained 67.06% of the variance. According to the results, the factor loading of items ranged between a minimum of 0.427 and a maximum of 0.799, meaning that all items were working and could be included in the analyses.

Data Analysis

The data were gathered with two 5-point Likert type instruments and both were scored with 5-point Likert type scales. The alternatives were given the values of 5, 4, 3, 2, 1 going from positive to negative and a higher score showed higher levels of information sharing. The mean scores were compared by using the following intervals: Always, 4.21–5.00; Mostly, 3.41–4.20; Sometimes, 2.61–3.40; Rarely, 1.81–2.60; Never, 1.00–1.80.

Prior to the regression analysis, Mahalanobis distance values, skewness and kurtosis values were checked. Data that violated the normality assumption were excluded from the analyses. The presence of autocorrelation between variables in the regression analysis was examined, and the Durbin-Watson value showed that autocorrelation did not exist (DW= 1.54). The data set was also examined with respect to the multicollinearity assumption and it was not detected between the independent variables (VIF <10, CI <30 for all variables). These investigations showed that the data set was fit for multiple regression analysis. It was therefore conducted.

Data were analyzed by calculating the mean scores of teacher responses to the "Scale for Social Capital at Schools" and "Scale for Organizational Information Sharing at Schools," by conducting the regression model on total scores and by correlation analyses. The independent variable in the study was organizational information sharing and the dependent variable was social capital level. In order to find whether the independent variable meaningfully predicted the dependent variable, linear regression analysis was conducted. Correlation analysis was used to find the direction of the relationship between organizational information sharing (independent variable) and social capital levels (dependent variable) according to teacher perceptions.

Findings

The correlation coefficients show a meaningful relationship between all subdimensions of social capital and organizational information sharing. The highest correlation was present between the trust subdimension and organizational information sharing. These results indicate that information sharing at schools is most associated with “trust,” which is considered to be the most important component of social capital.

The resulting regression coefficient was 0.957. This shows that while the total capital score increased 1 point, the information sharing score at schools increased 0.957 point. As a result, the regression model was as follows:
Information Sharing at Schools = 0.051 + 0.957 * Total Social Capital

The results of regression analysis showed that the model was meaningful as a whole (F = 285.72; p < 0.01), and that 51.7% of the change in information sharing scores at schools were explained by the total social capital score (r = 0.720, r² = 0.517). This result reveals that social capital overall strongly accounts for information sharing levels at schools.

The findings of multicollinear regression analysis between the subdimensions of social capital levels in elementary schools and organizational information sharing.

The regression coefficients show that “trust” is the most important subdimension of social capital in the model that explains the dependent variable. The relative order of importance of the dimensions in the regression model was as follows: Trust (β = 0.336), Tolerance (β = 0.194), Communication (β = 0.167), Cooperation (β = 0.132) and Loyalty (β = 0.091). Only trust and tolerance were statistically significant.

The model was meaningful as a whole (F = 59.84; p < 0.01), and the loyalty, communication, cooperation, trust and tolerance subdimensions of social capital meaningfully explained organizational information sharing at schools. The coefficient of determination (R² = 0.534) showed that approximately 53% of the variance in the regression model was explained by the subdimensions of social capital. This suggests that organizational information sharing at schools is strongly explained by the subdimensions of social capital.

Discussion, Conclusion and Recommendations

In this study, a meaningful relationship was found between all subdimensions of social capital and organizational information sharing. Cabrera and Cabrera (2005) have also concluded from their research that social capital increases the motivation of the groups by means of inter-individual relations and social interaction and in this way leading to a great contribution to information sharing. However, the findings have shown that “trust,” which is the most important component of social capital, is also the most important predictor of information sharing at schools. These findings are supported by previous studies as well (Kankanhalli, Tan, & Wei, 2005; Mayer & Gavin, 2005; Pan & Scarborough, 1999; Wang, 2004).

Many authors who see social capital as the sum of elements and values that enable people to work and produce together agree that its main element is “trust” (Coleman, 1988; Fukuyama, 2005; Putnam, 1993; Woolcock & Narayan, 2000). Previous studies (Goddard, Tschannen-Moran, & Hoy, 2001; Tschannen-Moran, 2004; Tschannen-Moran & Hoy, 1998) have also reached similar findings. According to the results, having trust-based communication and relationships among teachers and enabling them to trust the school management is critical to having trust and effectiveness in schools. In addition to the teaching staff trusting each other, establishing mutual trust between teachers and the school management is also directly related to school effectiveness, better quality teaching services, and a positive school climate. Tschannen-Moran states that the level of trust between teachers indirectly contributes to student achievement. He is of the opinion that trust encourages cooperation among teachers and enables them to create a new and shared understanding in students on permanent and effective learning. Sincere feelings fueled by this climate trigger information sharing within schools.

In addition to being a prerequisite for and indicator and product of trust, social capital also, an element that brings other benefits (Cohen & Prusak, 2001). Trust, in this sense, is flexible element of social capital (Fukyama, 2005). Coleman (1988) and Putnam (1995) also see “trust” as the key element of social capital and its most important determinant. Thus, networks based on a high level of trust-based communication function more easily and without problems than those based on a low level of trust. Such functioning offers an important opportunity to increase interpersonal information sharing. According to Field (2006), trust has a more significant role than other elements, particularly in the processes of information access and sharing. Moordian, Renlz, and Matzler (2006) have analysed the effect of trust on the information-sharing in their study. Their found results imply that a high level of trust among individuals in organizational environments facilitates the information sharing.

The regression analysis results in the study show that the model is meaningful as a whole, and that there is a highly meaningful relationship between social capital and information sharing at schools. This shows that, overall, information sharing levels at schools are strongly predicted by social capital and the regression model is highly supported by the data set at hand. Also in a study that Albino and
his friends (cited in Yang & Chen, 2007) conducted similar results have emerged. The acquired results are of the opinion that social capital - especially in net connections and active relations terms - affects the information dissemination and sharing in the organization positively. Likewise, Willem and Scarbrough (2006) states that trust, shared norms and organizational loyalty etc. concepts of social capital lead a way to prompt the actors that contribute to information sharing voluntarily and actively.

Social capital establishes active networks and links between actors in an organization and thus opens up communication and information channels (Nahapiet & Ghoshal, 1998). In this sense, it opens up the channels that shape relationships and functions as the lubricant that makes the system work actively (Requena, 2002). According to King (2004), networks take on a functional quality in organizational processes and naturally enable information to flow and relations to flourish. Networks that facilitate information flow and dissemination at schools also enable the building of robust and healthy relationships among school staff and community. Members of these networks contribute greatly to the flow, sharing and shaping of information. Mesmer-Magnus and DeChurch (2009) have found out that information sharing is closely related in organizational terms to the performance of teams, the harmony of workers and their satisfaction level based on seventy-two studies that dwell on information sharing in teams through meta-analysis method. Then it can be said that information sharing is being shaped under determinant effect of social relations, nets and groups.

Findings from the multicollinear regression analysis between the subdimensions of social capital levels in elementary schools and organizational information sharing show that the model is meaningful as a whole, and that the dimensions of social capital (loyalty, communication, cooperation, trust and tolerance) meaningfully predict organizational information sharing at schools. This, in turn, reveals that organizational information sharing at schools is strongly predicted by the subdimensions of social capital and that the regression model is highly supported by the data set at hand. Previous research has concluded that social capital levels of schools significantly affect the educational process. For instance, high levels of social capital found among students in a study at the tertiary level suggested that students learn more from each other than from formal instruction (Putnam, 2004; Israel et al., 2001). Bryk and Schneider (2002), found in their study that social capital is an important factor in increasing student success and rendering it permanent. And Blankenship (2009) has evaluated the views of school administrators in a qualitative study about behaviours of school managers that facilitate information sharing. Their results have hinted that the trust and information sharing among teachers are of crucial importance. Thus, on the whole, social capital facilitates the sharing of information and experiences to organize human relations and to provide sincerity and cooperation in relationships.

When the findings are evaluated, it can be seen that social capital has important functions relating to organizational information sharing at schools. The ability to achieve educational missions relies on active and effective information sharing at schools where organizational processes are completely knowledge-intensive and are shaped by the flow and sharing knowledge. School leadership and effective school literature states that information sharing will increase in the way it is aimed at providing that teachers attend the decision-making processes and feel secure as the members of a team (Harris, 2004 cited in Blankenship, 2009). Thus, it is paramount for school effectiveness that managers enhance their social capital and enable information flow between the actors in their schools by removing all barriers to information sharing. In order to accomplish this, school managers should make an effort to increase close relations, links, trust, belonging and loyalty between their teachers. In addition, information sharing between individuals, groups and other actors should be improved through time spent in common areas, having a shared vision, and participating in decision-making.

References/Kaynakça


