The Effects of Social Capital on School Success

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Abstract

The general aim of this study was to determine the effects of social capital levels in general high schools on university entrance exam (OSS) success, according to teacher opinions. A scale consisting of 62 items was developed for this purpose by the researchers. The southeastern Anatolian provinces of Batman, Diyarbakır, Gaziantep and Şanlıurfa were included in the study as they were socially and economically similar and were representative of the region. A total of 969 teachers from 30 general high schools with upper, medium and lower OSS success levels were contacted to obtain their views through questionnaires. The data were analyzed by using one-way ANOVA analysis and multiple regression analysis. The results suggested that the organizational commitment dimension of social capital had a meaningful effect on schools’ OSS success levels.

Keywords: Social Capital, Trust, Social Networks, School Culture.

Introduction

In recent years, the concept of capital has been treated in a much broader context than Marx’s classical definition which emphasized its economic aspect, i.e. the surplus value from the production process. This definition of capital is seen by Lin as the classical approach to capital. He argues that, in addition to being surplus value, capital should be seen the totality of recyclable and synergy-creating values in a broader sense (Lin, 1999: 28). This broader definition was needed because an inflexible and narrow perspective on capital failed to explain many social activities. This failure was revealed by studies conducted in the early 1980’s by sociologists, political scientists and educators. The discussions promoted by these studies not only unveiled the importance of social, cultural, human and intellectual capital forms such as creating value in social and economic processes or financial capital, but also showed with their comprehensive perspective that these were largely complementary resources (Taylor, 2000: 1025). Agreeing with these opinions, Bourdieu also treats the concept of capital in domains such as economic, cultural, human, symbolic and social capital (Bourdieu, 1986: 243).

The opportunity for individuals, groups and societies to reach different capital accumulations and use these to create values is proportional with the style and quality of their communication and trust relationships. By having a relational and social feature and...
complementing other forms of capital, social capital offers an opportunity to make these areas functional. The purely and directly economic meaning traditionally attributed to the concept of capital has thus given way to a new meaning: the totality of material and non-material possibilities which gives an added value to every initiative in all stages of social and institutional processes (Ekinci, 2008: 9).

Social Capital

The concept of “Social capital” was first used in 1916 by Lydia Hanifan to evaluate the school system in West Virginia. According to her, a quality communication and reciprocity between families that form the school community would reflect on the school and society as the enrichment of social capital. This would, in turn, ensure social integration and improve development and well-being, thus contributing to the formation of a more livable social environment (Woolcock and Narayan, 2000: 228).

Bourdieu was the first to use the term social capital in its current meaning, among other forms of capital. According to him, social capital is the aggregate of the resources which materialize from mutual acquaintance and fall to the share of individuals or groups (Field, 2006: 20). Treating social capital largely on the individual level, he considered the individual’s networks to be the main dynamic of gaining advantage in social processes and institutional structures. Coleman (1988, 95), on the other hand, treated social capital in a social context and defined it as people’s cooperation skills. Therefore, for him, social capital has an important role in facilitating a collective matter of action with shared understanding and responsibilities and for shared purposes (Kilpatrick, Field, and Falk, 2003). Putnam (1995: 665), who contributed significantly to the popularization of social capital, explained the concept as a type of synergy formed by trust, norms and social networks which provides cooperation among people to reach common goals. Fukuyama (2005: 42) emphasized trust as the main component of the concept of social capital. He claimed that social capital is born from the feeling of trust predominant in a society or institution. It is the determining element in the well-being and economic development of societies.

Theoreticians who were influential in the conceptualization of social capital define it as a combination of trust, social networks, mutuality, values and norms, which guide people’s cooperation and have a role in economic development and social well-being (Ekinci, 2008: 21). According to this, social capital is a determining factor in all stages of social processes. It is the basis of all social organizations ranging from interpersonal relationships, groups, institutional and organizational structures to larger social segments. According to Requena (2002: 10), possessing the elements of social capital is the sole most important indicator of quality work conditions and efficiency in an organization. Similar to the oil needed for a machine to operate, these elements are indispensable to the survival of organizations and the achievement of their goals. From this perspective, social capital is an enriching element for all human initiatives. Therefore, social capital levels make a difference in the success of schools shaped by human initiatives.
Social capital consists of the structural (connections among actors), relational (trust between actors) and cognitive (shared goals and values among actors) dimension of the relationship between organizational members. Each of these dimensions of social capital is arguably a powerful force for improving organizational outcomes by facilitating transactions that results in knowledge diffusion and collective action (Anderws, 2010: 584).

Social Capital in Schools

Social capital grows in relation to Value-based social relationships. The formation and strengthening of these values also depends on the relations between individuals and groups. Therefore, social capital plays a role in the success of organizational processes equal to the determining critical value of the human factor. Schools as an organizational structure with social effects of their input, processes and output are environments particularly shaped by the human elements and relationships.

Social capital in schools needs to be given due importance as it can integrate trust based relations and cooperative student, teacher and environment elements with social networks. Therefore, emphasizing the value of social capital for schools and seeking ways of improving it appear as important issues for school effectiveness. It is possible to divide social capital into two with respect to internal and external networks and its elements. The extent of internal social capital is reflected in the communication, networks and trust levels among students and their peers and the school management, school personnel and the environment. The social environment of the school, i.e. parents, community groups, NGOs and certain companies, play a complementary role outside the school.

Previous research results support the view that internal and external social capital levels in schools have important effects on the education process. A study conducted in tertiary level institutions showed that when high social capital levels were present among students, they learned more from each other than they did from formal education. It may therefore be assumed that trust relationships between teachers and administrators, as well as among teachers themselves, have a strong effect on the sharing of information (Putnam, 2004: 3-7).

A number of studies concerning social capital and education have focused on determining the existence of a relationship between academic success and social capital levels of schools or school-related social elements. Reviewed by Dika and Singh, a significant number of these studies found a positive relationship between social capital and school success. Many of these studies (Goddard, 2003, Holland, 2009), also concerned themselves with comparing school success and the social capital levels of families. Although a largely positive relationship was revealed between the social capital levels of students, schools, families and academic success, Dika and Singh still claimed that the relationship and interaction between school success and various elements of social capital was unclear (Dika and Singh, 2002: 41–44). However in a study about the effects of social capital on academic success, Goddard (2003: 64-71) studied the relationship between social capital levels at
schools and student success and reached different conclusions. He firstly determined the social network levels among parents, the society and students; and the social norms about trust relations between parents and students, as well as the support given to student learning. Comparing these with academic success, Goddard reached the conclusion that a strong relationship existed between students’ social capital levels and particularly math and reading skills.

In a study entitled “Social Capital in Education”, Dijkstra et al. (2003) examined the effects of social capital levels of families, and thus the school community, on academic success (i.e., language and math scores). The results showed a moderate relationship between academic success and social capital levels, and a stronger negative relationship between academic success and discipline problems seen in students. In other words, the higher social capital levels in a school community, the fewer undisciplined behaviors. The results also suggested a stronger relationship between close teacher-student relations and language scores. Plagens (2003), also examined the relationship between social capital levels and school success in a study about social capital and school efficiency. Believing that social relationships and interaction developed cooperation between individuals and groups and thus increased efficiency, Plagens argued that high social capital levels would increase student success. In his study, he concluded that high social capital in the school and school community increased academic success and decreased absenteeism and dropout rates.

Epstein’s (1988) research found a positive relationship between the parents volunteer work and pupils academic performance. She found a negative relationship between pupil achievement in mathematics and reading test scores and parental help with homework. Studies show that good schools have a distinctive ethos, where they have strong academic emphasis, positive rewards and attitude towards pupils, positive expectations, and a sense of community about them, present a fair and effective disciplinary climate and therefore promote parental involvement and create a positive learning environment for pupils. Schools reaching out to parents are great predictors of parent involvement (Haghighat, 2005: 217; Goddard, 2003: 61; Holland, 2009).

Elements of Social Capital in Schools

Even though different approaches have emerged in previous studies about the elements of social capital, it is possible to identify certain concepts that were agreed upon. For example, Putnam (2000: 19) emphasized networks, norms, trust and cooperation as the elements of social capital, while Coleman stressed trust, responsibilities, expectations, norms, relationships and cooperation. For King (2004: 472, 473), a shared vision, trust and cooperation were important, whereas Fukuyama (1999:1) mentioned the importance of trust, mutuality, cooperation and social norms. Cohen and Prusak (2001: 47), on the other hand, emphasized trust, cooperation, belonging and relationship networks. When examining the structure of schools, dimensions such as trust, loyalty, social networks, values and norms, social interaction and active participation need to be considered as elements of social capital. These elements and their formation are shown in Figure 1.
Figure 1 shows different components of social capital in schools, and the factors that feed and form them. According to this, social capital levels are identified by the communication and social interaction levels between school staff and community, organizational stories, participation of school staff and environmental elements in school decisions, common times and spaces shared by the social segments that comprise the school community, and all of the emotions that affect the common work of school staff. Depending on the interaction between these factors in social and organizational processes, it is possible to improve interpersonal trust, social interaction and active participation, organizational commitment, social networks, value and norms at schools. The development levels of these factors determine the quality of social capital. Therefore, investments made in social capital factors determine the future social capital amounts of schools.

**Figure 1: The Formation of Social Capital**

<table>
<thead>
<tr>
<th>Factors that Increase Social Capital</th>
<th>Social and Organizational Processes</th>
<th>Components of Social Capital</th>
<th>Social and Organizational Processes</th>
<th>Social Capital As a Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Trust</td>
<td>Social interaction and active participation</td>
<td>Commitment</td>
<td>Social Capital</td>
</tr>
<tr>
<td>Stories</td>
<td></td>
<td>Social Networks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in the Decision</td>
<td></td>
<td>Values and Norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Place and Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperation and Group Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Ekinci 2008, 52*

The most important and critical role in developing social capital in organizational environments and making it efficient belongs to administrators. If school administrators with leadership qualities act in awareness of this process and factors, social capital will serve the purpose as a value. Seen from the perspective of schools, what school administrators need to do is to be aware of social capital and facilitate its development. Such awareness defines social capital leadership, which prioritizes behaviors and activities which develop social capital in the institution. The behaviors expected from the school administrator as a social capital leader include making organizational trust, cooperation, belonging and commitment factors effective, and improving relations so as not to harm these; planning activities for social
spaces inside and outside school; constructing groups to enhance cooperation; and ensuring the participation of all parties in the decisions made at the school (Ekinci, 2008: 4). Studies to improve these will also improve school effectiveness and success. Many of the studies examining different dimensions of social capital in schools or its levels in different segments of the school community, and academic success in some classes and skills (Dika and Singh: 2002, Israel et al: 2001, Goddard: 2003, Dijkstra et al: 2003) have found positive relationships between these. Likewise, significant findings were obtained showing that higher school success was possible in schools with higher social capital levels or among students coming from families with privileged social capital levels (Goddard, 2003). Thus, it is argued that the social capital levels of teachers and school administrators affect student success.

**Methodology**

The main aim of this study was to identify social capital levels in general high schools according to their teachers, and show the relationship between social capital levels and school success on the OSS exam. This study is a relational survey. This research model aims to determine the presence and/or extent of parallel change between two or more variables (Karasar, 1995: 81).

**Population and Sample**

The population of the study comprises teachers who were working at the general high schools operating in Southeastern Anatolia region during the 2007-2008 academic year. The study sample included teachers who were working at the general high schools in the Southeastern Anatolian provinces of Batman, Diyarbakır, Gaziantep and Şanlıurfa, which had the highest number of general high schools.

In order to select the study sample, all general high schools in Batman, Diyarbakır, Gaziantep and Şanlıurfa were listed from the highest OSS scores to the lowest. As a second step, 6 high schools from each province with 10 or fewer general high schools (Batman and Şanlıurfa), and 9 high schools from each province with more than 10 general high schools (Diyarbakır and Gaziantep) were included in the sample to comprise a total of 30 general high schools. While these schools were selected, schools in each province were divided into 3 groups with respect to their success on the OSS exam. Separately for each province, schools with the highest OSS score were listed in group 1, those with the lowest OSS score were listed in group 3, and those in-between were listed in group 2.

During the 2007-2008 academic year, a total of 3,010 teachers were working in the 49 general high schools that comprised the population of the study. In the 30 high schools that were assigned to the study sample depending on their success levels, a total of 1,976 teachers were working. According to this, the proportion of the sample to the population was 65.64%. From the general high school in the sample, a total of 969 teacher opinions were obtained, which means that 49.03% of the sample was reached.
Development of the Data Collection Instrument

Data needed for the study were gathered by using a social capital scale. The basis for the study was established by a literature survey. The resulting 105-item questionnaire was then reduced to 73 items with the help of expert review. A preliminary administration was performed and the scale was then tested for validity and reliability. The preliminary administration was performed on 180 teachers working at High Schools in Batman, and then Principal Component Analysis was performed. According to the preliminary analysis results of the 73 items that were included in the first draft of the scale, the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value was 0.882, Bartlett Test was 8932.163, and Cronbach Alpha was .973. Sixty-two items with a factor loading of 0.35 or higher were found acceptable, and the remaining 11 were eliminated. Another factor analysis was performed on the 62 items and the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) value was found to be 0.901 and the Bartlett Test was 8047.753. The Cronbach Alpha reliability coefficient for all dimensions was .967.

The questionnaire had two parts, the first of which included personal information. The second part comprised the sub-dimensions of organizational commitment, communication – social interaction, cooperation – social networks and participation, trust and tolerance for differences and sharing norms. The questionnaire had a total of 67 items, 5 of which were about personal information.

Data Analysis

Following the completion of questionnaires, data were analyzed on SPSS package program for Windows. The following statistical operations were performed to transform data into findings and interpretations:

One-Way ANOVA was used in order to determine whether there was a difference between groups with respect to the variable of OSS success. The LSD Test was used to determine the groups that had differences between them. When distribution was not homogeneous, the Kruskal-Wallis Test was performed. In order to determine the groups that had differences between them, the Mann-Whitney U Test was performed separately between groups.

In order to analyze the relationship between social capital levels in general high schools and the OSS success of these schools, Multiple Regression Analysis was used. Before starting the Regression Analysis, outliers were eliminated both by examining this method and by examining Mahalanobis distances and Z values. The skewness and kurtosis values of data were checked at the meaningfulness level of 0.05. The dimensions of communication, cooperation and trust, whose skewness values were outside the normal range, were performed square root transformation to get rid of the skewness in the distribution. The data set was also examined with respect to multi linearity assumption, and it was maintained that no
multilinearity existed between the independent variables. After all these analyses, the data set was decided to be fit for multiple regression analysis.

Findings

This section presents teachers’ perception levels of the social capital levels in general high schools, and examines and interprets its relationship with OSS success.

The Differences between Success Groups According to their Social Capital Levels

Table 1 and 2 presents general findings about the relationship between social capital levels in general high schools and their success on the university entrance exam.

**Table 1:** One-Way ANOVA Results of Success Groups According to the Dimensions of Commitment, Communication and Cooperation

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>1st Group (N=347)</th>
<th>2nd Group (N=306)</th>
<th>3rd Group (N=316)</th>
<th>Variance</th>
<th>Groups with Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x} )</td>
<td>SS</td>
<td>( \bar{x} )</td>
<td>SS</td>
<td>( \bar{x} )</td>
</tr>
<tr>
<td>Commitment</td>
<td>3.30</td>
<td>.74</td>
<td>3.25</td>
<td>.77</td>
<td>3.16</td>
</tr>
<tr>
<td>Communication</td>
<td>3.13</td>
<td>.60</td>
<td>3.13</td>
<td>.62</td>
<td>3.10</td>
</tr>
<tr>
<td>Cooperation</td>
<td>3.00</td>
<td>.72</td>
<td>3.00</td>
<td>.75</td>
<td>2.96</td>
</tr>
</tbody>
</table>

P<.05*

...Table 1 shows findings about the relationship between social capital levels in general high schools and their OSS success. According to these findings, among the dimensions with normal distribution; namely, “organizational commitment”, “communication-social interaction” and “cooperation-social networks and participation”, a meaningful difference was only identified in the dimension of “organizational commitment” (F=3.06); (P<.05). The LSD test showed that differences in opinion existed between teachers working at the highest and lowest OSS success schools. While teachers from highly successful schools responded to the statements about school commitment at the level of (\( \bar{x} =3.30 \)) “sometimes”, teachers from low success schools also responded on the same level, albeit with a lower mean (\( \bar{x} =3.16 \)). However, when the success groups were taken into consideration, the highest means were seen to belong to the opinions of teachers working at highly successful schools. In other words, the social capital perception level of teachers working at highly successful schools was higher than that of teachers from less successful schools. From this perspective, it is possible to talk about a relationship between social capital levels in schools and OSS success, though it may be a generally weak relationship. In all three dimensions, the arithmetic means of groups showed that teachers responded to the items on the dimensions of “organizational commitment”, “communication-social interaction” and “cooperation-social networks and participation” (between \( \bar{x} =2.96 \) and \( \bar{x} =3.30 \)) on the level of “sometimes”.

No relevant image is provided.
Table 2: Kruskal Wallis Test Results of Success Groups According to the Dimensions of Trust and Tolerance

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>Rank Average</th>
<th>Kruskal-Wallis Test</th>
<th>Groups with Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st Group (N=347)</td>
<td>2nd Group (N=306)</td>
<td>3rd Group (N=316)</td>
</tr>
<tr>
<td>Trust</td>
<td>481.75</td>
<td>482.17</td>
<td>491.31</td>
</tr>
<tr>
<td>Tolerance</td>
<td>478.45</td>
<td>495.43</td>
<td>482.09</td>
</tr>
</tbody>
</table>

P<.05

With respect to different success levels, no meaningful difference was observed between different teacher groups’ opinions in the dimensions of “trust” and “tolerance for differences and sharing norms” which did not have normal distribution. The success levels of schools did not influence teacher perceptions about trust, tolerance for differences and sharing norms.

Findings and Comments on the Multiple Regression Analysis Concerning the Effects of Social Capital Levels in General High Schools on OSS Success

Table 3: Multiple Regression Analysis Results of OSS Success on the Dimensions of Social Capital
Table 3 presents the regression analysis results about the relationship between social capital levels in general high schools and their OSS success.

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard Error</th>
<th>β</th>
<th>t</th>
<th>P</th>
<th>Zero Order r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>159.271</td>
<td>1.081</td>
<td>-</td>
<td>147.383</td>
<td>.000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Loyalty</td>
<td>1.170</td>
<td>.366</td>
<td>.142</td>
<td>3.193</td>
<td>.001</td>
<td>.094</td>
<td>.102</td>
</tr>
<tr>
<td>Communication</td>
<td>.065</td>
<td>.538</td>
<td>.006</td>
<td>.121</td>
<td>.904</td>
<td>.035</td>
<td>.004</td>
</tr>
<tr>
<td>Cooperation</td>
<td>.296</td>
<td>.464</td>
<td>.035</td>
<td>.637</td>
<td>.524</td>
<td>.040</td>
<td>.021</td>
</tr>
<tr>
<td>Trust</td>
<td>-.806</td>
<td>.575</td>
<td>-.094</td>
<td>-1.402</td>
<td>.161</td>
<td>.008</td>
<td>-.045</td>
</tr>
<tr>
<td>Tolerance</td>
<td>-.167</td>
<td>.442</td>
<td>-.023</td>
<td>-.378</td>
<td>.705</td>
<td>.017</td>
<td>-.012</td>
</tr>
<tr>
<td>R= .118</td>
<td>R²= .014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F= 2.702</td>
<td>p= .020</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As a result of the multiple linear regression analysis between the dimensions of social capital and the OSS scores of schools, the regression equation was as follows: OSS success scores of schools = 159.271 + 1.170 commitment + 0.065 Communication + 0.296 Cooperation + -0.806 Trust + -0.167 Tolerance

This revealed a weak meaningful relationship between the commitment, communication, cooperation, trust and tolerance dimensions of social capital and OSS success scores of schools (R= .118, R²= .014). R² value indicated that 14% (0.014) of the variance in success scores were explained by the dimensions of social capital in the regression model. This suggested that the OSS success scores of schools were weakly predicted by the dimensions of social capital and this regression model was weakly supported by the data set at hand.

The zero order and partial correlations between the independent variables of social capital dimensions and the dependent variable of OSS success scores of schools showed a weak positive relationship between the commitment dimension of social capital and success scores (.094), which became stronger when other variables were controlled (.102). When the model was examined, no meaningful relationship could be observed between the other dimensions of social capital and success scores.

β values also showed that commitment, which had the greatest β value among the sub-dimensions of social capital, was the relative most important predictor of school success. The relative order of importance of the predictors in this regression model was as follows: 1. Commitment (β=0.142), 2. Trust (β= -0.94), 3. Cooperation (β=0.035), 4. Tolerance (β= -0.023), 5. Communication (β=0.006). In sum, many authors who view social capital as an aggregate of the factors and values which enable people to work and produce together (Coleman, 1998; Fukuyama, 2005; Woolcock and Narayan, 2000; Putnam, 1993) particularly emphasize commitment and trust. It is thus possible to argue that a feeling of trust based commitment is the most important factor which contributes to cooperation. The relationship...
between schools’ OSS success and teachers’ organizational commitment levels can be interpreted within this framework.

Conclusions and Recommendations

When teacher opinions about social capital levels in their schools were examined with respect to the OSS success levels of schools, a meaningful difference was only observed in the dimension of “organizational commitment”. Therefore, it is possible to conclude that organizational commitment makes teachers and administrators more efficient in developing the instructional process of the school. Similarly, the results of multiple regression performed to identify the effects of social capital levels in schools on their OSS success according to teacher perceptions also showed that the dimensions of communication, cooperation and social networks, trust and tolerance for differences were meaningfully related to success groups, albeit on a low level. Of the dimensions of social capital, a positive relationship was observed between “organizational commitment” and success groups. It is therefore possible to maintain that, of the elements of social capital, a strong feeling of commitment among teachers and school administrators affects school success.

Based on these results, the following recommendations can be made:

Commitment levels of school staff are important in the achievement of school aims. Thus, school administrators should strive to strengthen the feeling of organizational commitment, which is accepted to be an important component of social capital in schools.

A major area of responsibility for school administrators is to be aware of the internal and external dynamics that affect and are affected by the school, and ensure that these dynamics (teachers, parents, students and NGOs) participate in the decisions made for the efficiency of the school and thus cooperate with each other.

It is important that teachers, administrators and other environmental factors at schools trust each other. A teacher who finds his/her colleagues and administrators reliable and feels secure in their work place will naturally work with high efficiency.

School administrators are one of the most important factors affecting the quality of schools. This critical and determining role of school administrators requires that they are not only administrators but leaders, and that they undergo a selection and training process.

Schools should assume the mission of disseminating to the society quality relationships, social norms and values, cooperation and social adaptation, by basing these on social culture.
References


