The influence of social capital on school performances: a comparison between Italy and Romania

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Abstract: The pupils' social capital makes the difference between their ways of adapting and their school performance; it explains the inclusion process of various groups within the educational system, including the immigrants. This conducted study aims at identifying the variables which define the pupils with certain educational results. Various childrens' groups are being brought under discussion: children who reside Romania, but whose parents have emigrated to Italy, children who have immigrated to Italy together with their parents and children who reside Romania together with their parents. The analysis has included the scoring and nominal variables: social capital, gender, age, educational level and occupation of the mother/ father, the children's proximity to their parents etc. The multinomial logistic regression shows that the best available predictor of school performance is social capital, followed by the educational background of the mother, gender and proximity to the parents. The predictors are more adequate for the 'good' and 'excellent' school results.

Key words: social capital, school results, immigrants.

Introduction

Social capital is an aggregate of existing or potential resources correlated with the membership status in a group and with the existence of a solid, long-lasting network of relationships, more or less institutionalised (Bourdeiu,1983) or resulting from the social relations between the actants, for instance the relationship between parents and children (Coleman,1988). Other approaches underline the focus of the social capital on characteristics of social organizations, such as trust, norms and networks (Adler & Know, 2000; Putnam, 1993). In the approach centred on the individual social capital is designed as an investment in social relations, and this investment is expected to be returned (Nan Lin, 2000), as a product of the interactions which can contribute to the social, civic and economic wellness of the members of a community (Kilpatrick, Field & Falk, 2003).

The types of social capital identified by Coleman (1988) are: 1. trust, obligations and expectations of the structures; 2. informational potential as a basis for the actions; 3. norms and criteria for applying rewards and punishments to

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individual actions. Inside the walls, the types of social capital are represented by collegial networks (among peers), which have strong effects on the level of expectation and on the educational process, by the amount of trust present between teachers and administrators and by the cooperation climate between school and community. Networks which connect school to the community (outside the network walls) are added to the above (Putnam, 2004).

Influences of the Social Capital

The effects of the social capital, either positive or negative, depending on the context (Morgan& Sorensen, 1999), are considered to be obvious when it comes to education, the results of the children being directly related to their parents' social capital (Putnam, 2000). When parents get involved in their children's education, teachers report low levels of violence and apathy towards school tasks and a simultaneous increase of the pupils' wellness (Morrow, 1999; Portes, 1998; Coleman, 1988).

The effects of the social capital are different depending on the educational level. In secondary schools, supportive networks are the decisive factor which differentiate the manners of adaptation and activate the students' cultural norms (Nan Lin, 2000; Marjoribanks & Kwok, 1998). Ethnical support provides momentum and force, which are useful to academic success (Zhou, 1992). Acceptance among one's peers, the support given by them, helping each other inside the group, intensifies the feeling of safety that the pupils get in the school environment (Coleman, 1988).

The negative effects of social capital take place when the group norms are discriminatory and the networks are socially segregated, leading to the exclusion of certain people- which is possible in the case of immigrants - or when they favour conformity towards the group or restrain the rights of the individuals (Rustenbach, 2010; Putnam, 1993). Social capital is deficitary in monoparental families as well as nuclear families where one or both parents are absent from their child's life or the parents' attention is unequally divided between their children (Coleman, 1988).

A number of articles have analysed the social capital of various groups of immigrants in social contexts over the last decades, associated with the school results of their children and to other aspects of education. Groups of Chinese, Moroccan, Mexican immigrants have been analysed (Zhou, 1992; Bruna, 2009). Migration is seen not only as moving from one place to another, but also as a profound change, resulting in ambivalent feelings of loss and separation, which influence the reporting towards space and time, self-image, daily culture and linguistic practices (Duccio & Favaro, 1998). The sons of immigrants constitute a risk group, most probably punished by their educational failure and by psychological and adaptational difficulties (Favaro, 2011, 2001).

On the other hand, when underlining the creative potential of the milestone between two worlds and of the change in itself, the opportunities and wealth of

some life conditions which integrate a variety of points of view, more languages and more social memory (Favaro, 2011; Duccio & Favaro, 1998) are also highlited. Other articles take on a holistic perspective, analysing the sources of anti-immigrants attitudes in various European countries, their degree of satisfaction as reported to the level of the generation (Maxwell, 2010).

Most of the current approaches underline the heterogeneity of the impact of migration and the role of the States in offering favourable conditions to the immigrants (De Haas, 2010).

Measuring Social Capital

In order to measure social capital, the literature has focused on measuring the interactions between parents and children, having as indicators the frequency of their discussions on school tasks (Teachman, Paasch & Carver, 1996). The Integrated Questionnaire for the Measurement of the Social Capital (SC-IQ) has focused on more dimensions: groups and networks, trust and solidarity, collective actions and cooperation, information and communication, social cohesion and inclusion, power and action (Grootaert, Narayan, Jones, Woolcock, 2004). Recent instruments have included the social relations of the pupils and those of the teachers, the teachers', parents' and pupils' participation in governing the school and the community as well as the overall communication between school and community in general (Catts & Ozga, 2005).

Empirical study

Hypotheses

In the past 20 years, the number of emigrants from Romania has increased massively, particularly towards European countries. Some families emigrate with their children; other families leave their children at home. In both cases, the social capital is expected to decrease, which influences the adaptation and development of the children, as well as their school performance.

The objective of this research is to compare the school performance associated to the social capital of Romanian children's groups found in different social situations: (1) children who are in Romania, but whose parents immigrated to Italy, (2) children who have left for Italy together with their parents and (3) children who live in Romania with their parents. The below hypotheses have been established according to specific literature.

H1. The social capital of the three groups is different, the children residing in Romania with their parents thus having a higher social capital as compared to the two other subgroups.

H2. The social capital of the pupils is directly associated to their school performances.

H3. The school performances of the pupils can be predicted on the basis of the social capital and some of their personality traits.

Instruments

The used instruments were a five-scale questionnaire for the diagnosis of the social capital (SoCa), designed by the authors, the Rosenberg self-esteem scale (short version, 1965), the Raven progressive matrices and a factual data questionnaire regarding the age, gender, year of study, school results on subjets, such as mathematics, Romanian and Italian language, the yearly average, the level of education of the parents, the number of brothers/sisters). SoCa entails 75 forced-choice items, grouped in seven dimensions: relation with peers (10 items) relation with teachers (10 items), school activities (18 items), and school relations in general (12 items), family relations (15 items) trust/affective status (10 items). All scales present good internal consistency, the Alpha Cronbach being situated between .61 (trust) and .88 (collective educational activities), the internal consistency of the whole scale being .90 in its final form. The Alpha Cronbach is of .88 for the first part and .82 for the second part. SoCa was applied to the pupils, and high scores indicate a high social capital.

Sample

The sample is a convenience one, comprised of 150 primary school pupils, aged between 11 and 14, with an age average of 12.49. 47.3% of them are boys and 52.7% are girls. The children who immigrated to Italy with their parents are from the cities of Catania, Misterbianco, Bellpasso and Paterno, whereas the children who live in Romania (both those whose parents have immigrated to Italy and those whose parents are in Romania) live in the city of Ploiesti and the communes of Podenii Noi, Pacureţi and Balţeşti. The three categories of the subgroups are equal in terms of volume, each representing 33.3% of the total. The amount of children from the urban area is at 52.67% and one of those from the rural area is at 47.33%. The data were collected between 2009 and 2010, in Italy and Romania. Due to the fact that all the participants to this research were minors, the informed consent of both parents and children was obtained.

The parents' level of education was coded as follows: level 1 for general studies (junior high), level 2 for secondary studies (high school, vocational school and post-high school studies) and level 3 for higher education. The highest level of education is to be found with the parents who live in Romania, the level of education being slightly lower in the case of the parents who left the country. Considering the fact that the grading system in the two countries is different (grades from 1 to 10 in Romania and qualificatives in Italy) the school performance level was measured via a common code, comprised of 5 qualificatives (insufficient, sufficient, good, very good and excellent), after debating this issue with two teachers from each country.

Results

In the case of all three subgroups of pupils, the one way variant analysis for related scores indicated statistically significant differences between the scores at the global social capital level and in some of the seven subscales. F ranges between 10.89 and 47.34, being highly statistically significant (the significance level ranging between .025 and .001).

The post-hoc comparison, made by using the 'Turkey' test, highlights the following clarifications:

1. There are no differences among the 3 groups as far as the 'family relations' scale is concerned.
2. The relations inside the school' are not significantly different for the groups of 'pupils whose parents are in Romania' and 'pupils whose parents are not in Romania'.
3. The relations 'Teacher-pupil' are not significantly different for the subgroups of pupils who live with their parents in Italy and those who live in Romania without their parents
4. The global social capital does not differenciate between the groups of pupils who live with their parents in Italy and those who live in Romania, but whose parents immigrated to Italy, but both groups are different from the one where the pupils live with their parents in Italy.

Table 1: *Correlations between the SoCa questionnaire scores and the researched variables*

Variables	Yearly qualificative	Raven	Self-esteem	Level of education	
				Mother	Father
Yearly qualificative	-			464**	331**
Raven	.557 **	-	-	268**	199*
Self-esteem	.313 **		-	281**	-
Level of education of the mother	.460 **	.242 **	.258 **	-	.627**
Level of Education of the father	.322 **	.199 *	-	.627**	-
Colleague Networks	.332 **	-	.357 **	.142 *	-
Student Teacher relations	.265 **	-	.261 **	.195*	.176 *
Collective school activities	.488 **	-	.391 **	.337 **	.194 *
Inside the walls relations	.323 **	-	.292 **	-	-
Family relations	.381 **	-	.407 **	.196*	-
Total social capital	.482 **	-	.445 **	.272**	-

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Features of the pupils according to school results classifications

In order to establish the features which distinguish between the pupils with different school results the multinomial logistic regression was conducted. The methodological restraints concerning the application of the logistical regression ware respected: the dependent variable is a categorial, pentatomic one, the categories are exclusive, and the volume of the sample is situated slightly above the inferior limit. The independent variables which were introduced in the model are based both on literature data, which include socio-demographic factors, personality traits and situational factors in determining educational success as well as on the correlations we obtained (Table 1).

According to the stepwise analysis method, the first introduced predictor is social capital wealth, followed by the educational level of the mother, the gender of the pupil, his/her proximity towards the parents and the cultural environment (Table 2). The value of a -2 log likelihood probability diminishes with every predictor, indicating a greater adequacy of the model. The chi square value is significant to a point of less than .05. The likelihood ratio tests suggest that eliminating any of the predictors would lead to the decrease of the correspondence between the predicted and the real data. Consequently, the predictors should be kept as such in order not to affect the accuracy of the classification.

Table 2: *Step Summary and Likelihood Ratio Tests*

Effect	Step Summary				Likelihood Ratio Tests			
	Model Fitting Criteria	Effect Selection Tests			Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square[a]	Df	Sig.	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	357.397				257.891[a]	.000	0	
Social_Capital_Wealth	319.979	37.418	6	.000	275.584	17.692	6	.007
Educational Level of the Mother	285.527	34.453	15	.003	290.425	32.534	15	.005
Gender	273.047	12.480	3	.006	269.405	11.514	3	.009
Proximity towards Parents	257.891	15.156	6	.019	273.047	15.156	6	.019

In order to evaluate the degree of correspondence between the model and the real, factual data, Goodness-of-fit type tests were used. For this model, the predicted data correspond to the real ones, the differences between them being statistically unimportant. Therefore, the model is capable of explaining the frequencies observed (for the Pearson test, chi-square =314.93; sig.=.13). The

pseudo R square statistics show, through all methods, that the values of the combined correlation between school results and the predictors in the analysis are moderate. The independent variables introduced in the model explain between 25.5% (the McFadden indicator) and 52.4% (the Nagelkerke indicator) of the school results variance.

According to table 2, eliminating any of the predictors would significantly diminish the correspondence between the model and the real data, so the predictors are to be kept as such. In previous versions we introduced more predictors (self-esteem) but these did not increase the correspondence between the model and the real data. The predictors, which best differenciate between the school results categories, are the following:

a) The proximity towards the parents' predictor and the 'poor social capital' (category 1 B=2.56; sig.05) predictor both significantly make a difference in the case of 'sufficient' school results for children who live in Romania with their parents

b) In the case of the 'good school results' category the social capital predictor is still highly involved (B= .75; sig. = .021), but another predictor is also important at this level, namely the level of education of the mother: when the mother had level 2 studies (vocational school) B=3.2; sig.=.014; when she had level 4 studies (higher education) B=2.17; sig.=.018).

c) For the 'very good results' level, the predictor which most differentiates is gender (B=1.84; sig.=.008).

The precision of predictions varies for the 4 categories of the dependent variable (table 4), being more precise for the 'good' and 'excellent' results (61.9%) and less precise for the other school performance levels: 'very good' (48.6%) and 'enough' (41.4%). In the case of 'good' and 'excellent' school results there were almost 2 out of 3 chances to make the right prediction whereas in the case of the 'sufficient' results, the situation is the other way around.

Table 3: *Classification*

Observed	Predicted				
	Sufficient	Good	Very Good	Excellent	Correct percentage
Sufficient	10	16	1	2	34,5%
Good	8	39	9	7	61,9%
Very Good	0	14	18	5	48,6%
Excellent	0	6	2	13	61,9%
Overall Percentage	12,0%	50,0%	20,0%	18,0%	53,3%

If we aimed to make individual predictions on the basis of the obtained data, we would notice more possible predictor variable models having a value of

over 70% by inspecting table 4 (observed and predicted frequencies). The first three high-probability predictors are described in the before mentioned table.

Table 4: *Observed and Predicted Frequencies*

Social capital wealth	IQ measured with the Raven Test	Level of education of the mother	Proximity towards parents	Gender	School results category	Prediction probability
Poor social capital	Normal intelligence	Junior-high	With parents in Italy	Boy	Good	80.7%
Medium social capital	Normal intelligence	Junior-high	With parents in Romania	Girl	Good	71.6%
Medium social capital	Normal intelligence	Higher Education	With parents in Romania	Boy	Very good	70.6%

Discussions and Conclusions

The social capital differenciates between the ways of adapting and school performance of the pupils explains the educational system inclusion process of various groups, including immigrants. The conducted study was aimed at identifying the influence of the social capital on school results. Groups of Romanian children found in various situations were compared to: children who live in Romania, but whose parents have emigrated in Italy, children who have immigrated in Italy with their parents and children who live in Romania with their parents. The data analysis has been conducted considering the following variables: gender, age, level of education and occupation of the mother/father, proximity of the children towards their parents.

The Romanian children who live in their own country are integrated in more social relation networks as compared to the children who left Romania with their parents. Changing the cultural environment had a more powerful impact on the networks that they are included in. The only significant differences as far as the pupils from the rural area as compared to the ones from the urban area are concerned, are perceived at the level of 'relations inside the walls' there is a higher score for the urban rather than the rural area.

The Romanian children who immigrated to Italy with their parents have a poorer social capital, being integrated in fewer social networks as compared to the Romanian children who live in Romania with their parents. As expected, the similarities to the groups in the new environment is reduced; in order to hold social capital, the pupil has to relate to his colleagues, the possible advantages residing, not in his/her inner-self, but in the social relations they manage to establish.

The social capital volume depends on the size of the social relations network in which the pupils can integrate, as well as on the economic, cultural or symbolic capital volume which every member of the network holds (Bourdieu, 1986). In the case of Romanian children who have immigrated to Italy, the volume of social capital is also diminished by the economic, cultural or symbolic capitals, which are supposedly higher in the case of Italian children. For these reasons, Romanian children who immigrated to Italy can acquire fewer obligations from the part of their Italian peers which could be returned at some point, as pointed out by other sources as well (Portes, 1998). The only scores which are not significantly different between the subgroups 'pupils with their parents in Italy' and 'pupils who live in Romania without their parents' are found on the scale of 'teacher-pupil' relations, thus confirming other research: a scuola nessuno è straniero, according to Favaro (2011).

The Romanian children who live in their own country with their parents are integrated in more relation networks as compared to the children whose parents left the country. The 'family relations' network does not register significant differences between the three groups. Unfortunately, this capital can be of little use to the pupils whose parents left the country. The social capital existing outside of the family, consisting of the social relations which exist between the parents inside a community and their relations to the institutions of that certain community is very poor or even inexistent, having few positive effects on the overall development of children, as stated before (Coleman,1988). The cultural and financial capital of the parents becomes available only if the child-family bonds are strong enough. A family where the parents are physically absent, as in the case of the pupils whose parents emigrated, have fewer possibilities of transmitting the social capital of the parents and this leads to diminishing the positive effects on the development of the children. The social capital is somewhat transmitted to the children by the relatives who nurture them-grandparents or other relatives.

In order to identify the distinctive features of the pupils on the basis of the five categories of school results expressed by means of qualificatives, a logistic multinomial regression was conducted. The data analysis suggests that the school performance of the pupils can be predicted by the social capital: the pupils in a category can be identified according to the wealth of social capital, the educational background of the mother, gender and proximity towards parents. The pupils in the categories 'good school results' and 'excellent school results' can be identified to a percentage of 61.9%, thus there are two out of three chances of making the right prediction. By way of contrast, the pupils in the category 'sufficient results' can be identified to a percentage of only 34.5%, therefore there are two out of three chances of making a wrong prediction. Other personality features (self-esteem) correlate with the social capital of the pupils, but do not make the object of the final model.

The most likely prediction for an individual case is that of 80.7%, for the case of the pupil described on the first table line. This is a pupil with 'good' school

results, of male gender, residing in Italy with his parents. His mother has junior-high studies, his IQ level is an average one, and the social capital is poor. It is possible that immigrant pupils are sometimes penalized for their school failure or for adaptation difficulties which also threaten the children who live in Romania, but whose parents have immigrated to Italy (Favaro, 2011).

The results of the current research sustain the relevance of the approach that underlines the heterogeneity of the migration impact, demonstrating that the increase of mobility of the workforce does not automatically bring positive effects on a large scale.

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