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**Private Tutoring and Educational  
Inequalities in Canton Ticino -  
Switzerland**

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Dr. Gregory T. Papanikos  
President  
Athens Institute for Education and Research

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## **Private Tutoring and Educational Inequalities in Canton Ticino - Switzerland**

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### **Abstract**

In recent times in Western Europe private tutoring has grown considerably and has become increasingly evident. Social competition, school performance rankings, examination-based learning, the pressures transmitted to families and children along with the cuts in public funding for education have been strong driving forces for the expansion of private tutoring.

The first purpose of this study is to gain an understanding of the nature of private tutoring among secondary school students in Canton Ticino, the Italian speaking region of Switzerland, on the basis of the analysis of PISA 2009 data. With 37.5% of students who have at least occasionally taken private tutoring during their 3rd-4th year at lower secondary school, Ticino ranks 4th in Switzerland and this position seems to be positively correlated with the level of inequality measured by the Gini Index: where there is a high level of inequality, access to resources becomes of crucial importance and a sort of rush towards private tutoring is registered.

The second purpose is to use logistic regression models to test the hypothesis that, other things being equal, private tutoring is not a peculiarity of those families who do not possess the intellectual resources to help their children at school, but on the contrary, is typical of the higher socio-economic and better educated groups, who do their utmost to maintain their competitive advantages and to prevent the risk of downward mobility of their children. This hypothesis derives from the theory of credentialism according to which the upper classes try to facilitate their children to achieve educational credentials necessary for monopolizing access to lucrative positions. The role of the students/teachers relationship and the students' satisfaction with school seem rather marginal and a more in-depth investigation on class atmosphere and parents' attitudes towards school is required.

### **Keywords:**

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## Background

Research and policy attention began to focus on the phenomenon of private tutoring in a significant way only in the 1990s. Much of the initial attention focused on Asia, particularly on Japan and South Korea, where tutoring has been established for longer periods as a major element in the lives of young people and their families and in certain cases involves more than 80% of students (Marimuthu et al. 1991; Harnisch, 1994; Zeng, 1999).

In the following decade attention turned to other parts of the world in which tutoring was becoming significant (Bray, 1999; Bray, 2003; Baker & LeTendre, 2005; Southgate, 2009). In Europe differences in use of private tutoring across countries can be very large. While it is a marginal phenomenon in Scandinavia and the Netherlands (Southgate, 2009; OECD, 2011), the southern European countries, in particular Greece and Cyprus, and the former Soviet countries show very high rates of tutoring (NESSE, 2011). However, significant variations may also be found within countries: in Austria, for instance, the most tutoring is registered in Vienna (32% of the sampled households), the least in Tyrol (11%) (AK-Wien, 2010).

In Switzerland, if we exclude a couple of studies (Mariotta and Nicoli, 2005; Hof et al., 2011) private tutoring is quite an unexplored topic, although its importance can be easily perceived.

Private tutoring is a contested issue. Its dramatic expansion can reflect shortcomings in the education system or be connected with an excess of demand from families even where the public education system works efficiently.

If on the one hand it can increase society's stock of human capital, on the other hand the different pedagogic approaches of teachers and tutors can confuse pupils. Moreover it can have negative effects on socialization, making the school day very long or can discourage individual efforts as students end up relying on tutors. But the biggest problem is that it may be a heavy burden on low-income families and can contribute to maintaining or even increasing social inequalities (NESSE, 2011).

According to the credentialist theories (Collins, 1979), upper class families seek to limit their children's risk of downward social mobility and do their utmost to ensure that their offspring do well in school and progress to higher education. One might assume that these families opt for paid private tutoring even before their children need it, as they feel that schooling by itself is not enough to secure a superior social position, even when that schooling is provided through private institutions. The reason why paid private tutoring is used might have more to do with the concept of enrichment, rather than remedying any gaps and would reflect the so-called "Matthew effect", whereby the children of better educated families are more likely to study more and longer (Dannefer, 1987; Blossfeld & von Maurice, 2011).

In other words, the issue to be addressed is whether private tutoring is aimed at helping students keep up with their peers or is mostly provided to students who perform well already, for the purpose of keeping them ahead of

their peers. Most of the studies carried out in many different countries suggest that the latter option prevails (NESSE, 2011).

This paper is part of a study commissioned in 2012 by Canton Ticino's Department of Education, Culture and Sport to the Center for Innovation and Research on the Education Systems of the University of Applied Sciences and Arts of Southern Switzerland. This research aims to provide an in-depth description of the phenomenon of private tutoring in middle school and secondary education, quantify it and determine whether it can exacerbate social inequalities, as stated above.

Equity in the provision of education – i.e education offered to all students regardless of their social origin, gender and credentials - is one of the main goals of Canton Ticino's school system (and not only there). Although the results of the PISA survey show that in Ticino socioeconomic and cultural status has a lower impact on school performance than in other cantons (Zahner Rossi, 2005), it still plays an important role, both in terms of success and choice of the type of school to attend (Cattaneo, 2010).

## **Methodology**

One of the conclusions of a recent report prepared for the European Commission is that more research into the phenomenon of private tutoring is required as many actors deliberately avoid transparency and also on account of the difficulty in accessing reliable information; it is a topic that has been barely on the agendas of researchers and policy analysts (NESSE, 2011). Students may be unwilling to expose the amount and types of tutoring they receive because it might seem to give them an unfair advantage in competition with their peers. Parents may want tutoring to remain confidential as school authorities could interpret the demand for private tutoring as a sign of lack of confidence in schools. Tutors probably prefer not to reveal untaxed incomes and governments may be unwilling to expose the private tutoring phenomenon, because it could be perceived as a weakness in the education system (ESP, 2006).

In addition to its descriptive purposes, this paper aims to test the hypothesis that the use of private tutoring is more typical of the upper and better educated social classes and meets the desire for enrichment, i.e. it is provided even in cases where the pupil is already doing well at school.

To do this, we have used data from the PISA 2009<sup>1</sup> questionnaire involving 1104 students in the fourth (and last) year of Ticino's middle

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<sup>1</sup>For further information about the PISA survey and the sampling procedure see Consortium PISA.ch (2011). All the results of the PISA 2009 survey mentioned in this paper were obtained by weighting the data against the final weight per student; reference should therefore be made to the total of 3038 students, of which 1104 is a representative sample.

schools, representing a population of 3038 units from 35 different schools. The descriptive analysis is complemented by a logistic regression model, which allows testing the above hypothesis. This method is suitable for cases in which the object of analysis is a dichotomous variable typically associated with making a choice; it allows evaluation of whether - and to what extent - each of the independent variables entered in the model contributes to changing the way in which the dependent variable manifests itself, all other things being equal (Pisati, 2003).

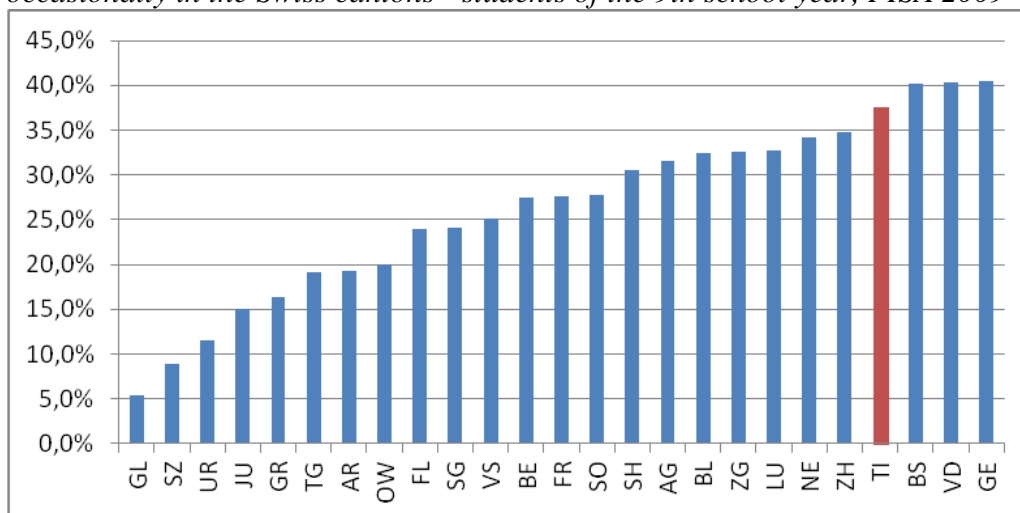
Unfortunately, since the term “private tutoring” or “private lessons” has different meanings in research conducted in different countries at different times, it is very difficult to make comparisons. In the Swiss PISA 2009 questionnaire “private lessons” or “private tutoring” means educational support related to school subjects provided outside school hours and whose cost is borne by the student’s parents.

## Results of the Analysis

### *Descriptive Analysis*

37.5% of students in Ticino claim they have taken private lessons at least occasionally (that is, if not with a certain continuity, e.g. one or more classes per week, at least for a limited period of time, e.g. during school holidays) in the period between the third and fourth year of middle school. That is one of the highest percentages in Switzerland (figure 1) with remarkable differences between schools.

**Figure 1.** *Percentage of pupils who have taken private lessons at least occasionally in the Swiss cantons - students of the 9th school year, PISA 2009*



In general, it appears that some of the cantons with a high percentage of young people using private tutoring in the middle school years also record a high level of social inequality (Gini index > 0.4). That holds true in the cantons



of Geneva (GE), Vaud (VD), Basel-city (BS) and Ticino (TI)<sup>1</sup>. Spearman's rho coefficient equal to 0.46 - and significant at 5% - shows a moderate correlation between the two variables and seems to corroborate, although not strikingly, the credentialist assumption whereby a high degree of inequality correlates with a greater propensity to pay for private tutoring as a means of facilitating the acquisition of those educational qualifications which allow competing social groups to monopolize positions of power and decide who to let in and who to exclude on the basis of social closure (Collins, 1979; Parkin, 1979; Southgate, 2009).

Among the students in Ticino, the school subjects for which paid private lessons are most frequently taken include: mathematics (29% of students), foreign languages (18%) and Italian (8%).

Private maths lessons are taken more frequently by girls (30%) than boys (26%) while there is no significant gender difference with regard to language, be it Italian or a foreign language. As indicated, these percentages also include casual users of private tuition. As for regular private tutoring users (pupils who in the third-fourth years of middle school take private lessons regularly, one or more times a week), 12% get help with maths, 5% with a foreign language and 2.5% with Italian.

An interesting fact is that out of 232 pupils who said they took private lessons - at least occasionally - during the fifth year of elementary school over 70% used private tutoring also in the third-fourth years of middle school. That percentage drops to 37% for pupils who have never taken private lessons during elementary school years. Therefore, it seems that those receiving private tutoring during primary education tend to receive it also in later years, either because of real persistent difficulties or as a matter of mindset.

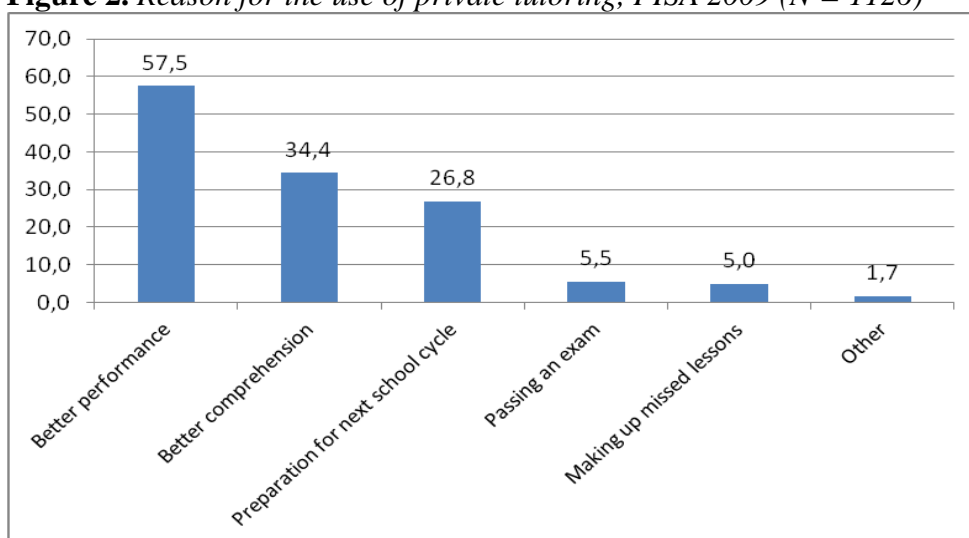
Our analyses revealed no significant relationship between having failed one or more school years and the use of private lessons. This suggests that private tutoring is not merely an instrument to address learning difficulties. Rather, it is the result of a specific approach to learning, poor relationships with school teachers and, of course, a deliberate education strategy of the student's family.

With regard to the reasons behind the use of private tutors, it turned out that, in addition to 57% of students willing to improve their school performance and one-third of students aiming to improve their understanding of a specific school subject, some students resort to private tutoring to prepare for the transition to the next school level or an admission test (figure 2).

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<sup>1</sup>The Gini index for the other Swiss cantons can be found in a publication of 2010 produced by the Swiss Federal Department of Finance, Federal Tax Administration, Research Division (*Département fédéral des finances DFF, Administration fédérale des contributions, AFC Division Etudes et supports*). This is an index used to measure inequality in the distribution of income or wealth. It uses values between 0 (perfectly equal distribution) and 1 (situation in which only one person has all the income of the country, while the others have zero income). Usually a value greater than 0.4 is typical of regions with a high degree of inequality. In Switzerland that was the case in the cantons of Schwyz (0.513), Zug (0.492), Geneva (0.454), Vaud (0.411), Ticino (0.406) and Basel-City (0.402).

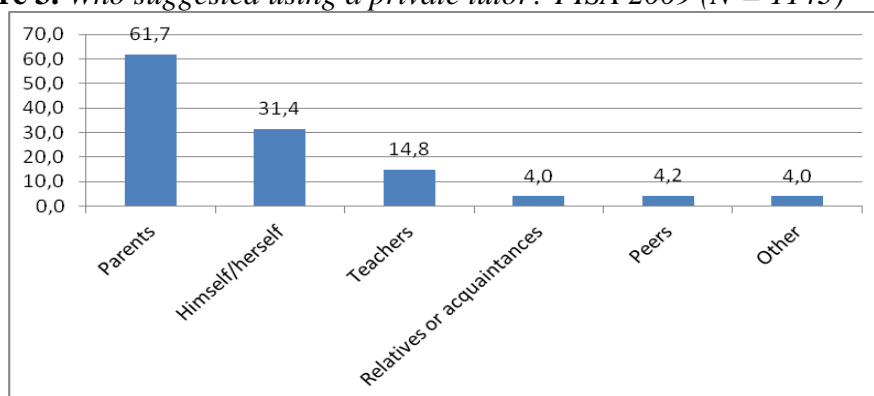
**Figure 2.** Reason for the use of private tutoring, PISA 2009 (N = 1126)



Admittedly, questions about motivations and attitudes are always quite tricky in sample surveys and in this case it could be argued that the “enrichment” aspect is overestimated compared to the “remedial” aspect. However, the fact that students who failed one or more school years do not show a significantly higher propensity to private lessons than those who have never repeated a year, supports the thesis that the remedial aspect is not prevailing.

The hypothesis that the use of private tutors is the result of a specific strategy planned by the student’s family is supported by the fact that in nearly two-thirds of cases the idea of resorting to private lessons comes from the student’s parents or relatives (figure 3).

**Figure 3.** Who suggested using a private tutor? PISA 2009 (N = 1143)



A positive correlation was found between the socio-cultural background of the student’s family and the use of private tutoring in the third - fourth years of middle school: children from better educated families with a higher social position receive private tutoring more often than the others (see table 1). These results are in line with the survey carried out in Ticino by Mariotta & Nicoli

(2005) on the data for 2000 and 2003, and with many other studies (Southgate, 2009; AK-Wien, 2010; Hof & Wolter, 2011).

**Table 1.** *Social background of students receiving private tutoring, PISA 2009*

Sociocultural background	Private lessons in the third- fourth years of middle school		Total
	No	yes	
White-collar/ high-skilled	60.5	39.5	1624
White-collar/ low-skilled	62.8	37.2	804
Blue-collar/ high-skilled	67.0	33.0	227
Blue-collar/ low-skilled	77.4	22.6	133
<b>Total</b>	<b>62.5</b>	<b>37.5</b>	<b>2788</b>

A similar conclusion can be drawn also when looking at the relationship between the use of private tutoring, the socio-economic-cultural index <sup>1</sup> and the family's cultural status, taking into account the relevant significance tests. One possible explanation might be a greater fear of better-off parents that their children may experience downward social mobility; to offset that risk they encourage their children to take on more ambitious school projects, and private lessons are a part of their strategy, as they can help retain their children's competitive advantage (Collins, 1971 and 1979).

With regard to specific school subjects, only 6% of children of highly-skilled white-collar workers take Italian lessons compared to 13% of low-skilled blue-collar workers' children. As for private maths lessons, they are taken by about 30% of highly-skilled white-collar workers' children and 18.9% of low-skilled blue-collar workers' children. This may depend on the fact that the children of white-collar workers have both better language skills and a greater propensity to attend a *Liceo* after middle school, i.e a type of high school where mathematics commonly play an important role.

In over half of the cases, the students and their families turn to other students and acquaintances for private lessons; approximately 40% hire teachers from other schools or private schools to act as private tutors.

In many cases, families from different social backgrounds and cultural levels turn to different groups of people for private lessons: so, for instance, low-skilled blue-collar workers tend to resort less to private school teachers and are more likely to employ acquaintances as tutors. The PISA survey does not allow us to have a clear picture of private tutors' qualifications and the effectiveness of the private lessons they deliver. One of the possible risks for students from a low social class is that they receive private lessons from tutors

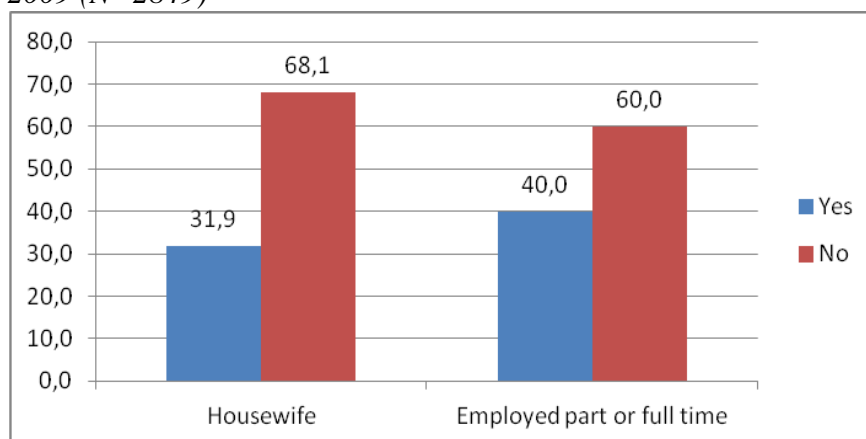
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<sup>1</sup>The socio-economic and cultural index takes into account the number of a certain kind of material goods owned by the household, the employment level of the parents and the parents' educational level measured in years of schooling.

who are not suitably qualified, resulting in a useless or even counterproductive experience. In other words, inequalities may concern both the amount and the quality of private tutoring received.

Also, if the student's mother is a housewife, the propensity to use private tutoring is smaller than in cases where the mother works part-time or full time (figure 4).

**Figure 4.** *Employment situation of the mother and use of private lessons (%), PISA 2009 (N=2849)*



Another variable that seems to be negatively correlated with the use of private tutoring is the number of siblings (table 2): understandably, the presence of other children leads parents to divide the resources to be allocated to education between them. This is also confirmed by other studies (eg. Downey, 1995; Wolter, 2003).

**Table 2.** *Use of private tutoring and presence of other siblings in the household %, PISA 2009*

Are there brothers or sisters in the family?	Private lessons in the third-fourth years of middle school		Total
	No	Yes	
No	56.2	43.8	728
Yes	64.7	35.3	2121
<b>Total</b>	<b>62.5</b>	<b>37.5</b>	<b>2849</b>

Taking schools into consideration, the use of private lessons appears to be more common where the student has a bad relationship with the majority of teachers (table 3). The Chi-square test confirms that this correlation is significant.

Studies conducted in other countries (Davies, 2004) reveal that the parents of children who take private lessons are more dissatisfied with the school; in some cases private lessons are a substitute for private education, which is considered more effective and custom-made. The PISA survey does not offer accurate clues on whether Ticino families share that point of view. However, students who take private lessons do not seem to consider schooling less useful

than those who do not use private tutoring; on the contrary, they rate the usefulness of school education for adult life even higher.

**Table 3.** *Use of private tutoring and level of agreement with teachers (%), PISA 2009*

I get on well with the majority of my teachers	Private lessons in the third-fourth years of middle school		Total
	No	Yes	
I totally disagree	55.7	44.3	158
I disagree	56.1	43.9	435
I agree	63.1	36.9	1757
I totally agree	68.1	31.9	495
<b>Total</b>	<b>62.5</b>	<b>32.5</b>	<b>2845</b>

### *The Model*

The multivaried analysis method of logistic regression has been used to look more deeply into the relationships between the factors that - to a different extent - may affect the decision of students to use private tutoring. As can be seen in table 4, the model covariates include: the quality of relationships with teachers; the average PISA test scores in maths, Italian and science – which are expected to negatively affect resort to private lessons; the fact of having taken private lessons while attending elementary school- which is a possible indicator of a family that gives special importance to their children’s school performance and therefore it probably has a positive effect on resort at middle school; the socio-cultural family background – well-off families are expected to favour private lessons because they can afford them and have a greater fear of downward mobility. Having a mother with a full- or part-time job is also expected to favour private tutoring, for the same economic reasons mentioned above, while the opposite applies to the presence of siblings. Gender is another control variable.

As table 5 shows, the results of the model confirm the above expectations. Those who have a more affluent socio-cultural background, a medium or high level of objectified cultural capital<sup>1</sup> and a working mother are more likely to use private lessons than those who come from lower-income families, even though the former have higher average competence scores - and therefore presumably better school performance and less need for extra lessons. That may be considered a confirmation of unequal access to private tutoring for the different social groups. Also having taken private lessons when at elementary school rises the likelihood of using private tuition at middle school as well as having poor relationships with teachers. However the modest percentage of variance explained (the Nagelkerke R<sup>2</sup> equals just 0.13) tells that other variables not included in the models may be contributing to the resort to private lessons and further investigation with an ad-hoc survey is required.

<sup>1</sup>This refers to the possession of the classics, such as literature, poetry books, works of art.

**Table 4.** Variables included in the logistic regression model regarding private tutoring

DEPENDENT VARIABLE	MODALITIES
Private lessons in 3 <sup>rd</sup> -4 <sup>th</sup> years of middle school	0 = no 1 = yes
COVARIATES	MODALITIES
Gender	1 = female 2 = male
Having taken private tutoring in the 5 <sup>th</sup> year of elementary school	0 = no 1 = yes
Average of 15 marks in mathematics, Italian and science	278 to 706
Agreement with teachers	1 = I totally disagree 2 = I disagree 3 = I agree 4 = I totally agree
Socio-cultural family background	1 = white collar – high-skilled 2 = white collar – low-skilled 3 = blue collar – high-skilled 4 = blue collar – low-skilled
Housewife mother	0 = no 1 = yes
Objectified cultural capital index	-1.62 to 1.10
Presence of siblings in the family	0 = no 1 = yes

**Table 5.** Logistic regression model for analysis of the likelihood of using private tutoring: estimates of maximum likelihood and goodness of data fit. 2305 4th year students, middle school, PISA 2009

Parameters	Estimates	Standard Errors	Wald Statistics	Degrees of freedom	Signific.
<b>Constant</b>	3.130	0.421	55.356	1	0.000
<b>Gender<sup>a</sup></b>	-0.214	0.092	5.366	1	0.021
<b>Private lessons in 5th year of elementary school<sup>b</sup></b>	1.202	0.163	54.113	1	0.000
<b>Average competence marks</b>	-0.006	0.001	60.260	1	0.000
<b>Agreement with teachers<sup>c</sup></b>			11.308	3	0.010
Disagree	0.009	0.211	0.002	1	0.965
Agree	-0.176	0.186	0.893	1	0.345
Totally agree	-0.488	0.210	5.419	1	0.020

<b>Socio-cultural family background<sup>d</sup></b>			18.159	3	0.000
Low-skilled white collar	-0.195	0.106	3.371	1	0.066
High-skilled blue collar	-0.238	0.177	1.820	1	0.177
Low-skilled blue collar	-1.055	0.262	16.224	1	0.000
<b>Housewife mother<sup>e</sup></b>	-0.219	0.099	4.922	1	0.027
<b>Objectified cultural capital index</b>	0.211	0.048	19.257	1	0.000
<b>Siblings in family<sup>f</sup></b>	-0.334	0.104	10.261	1	0.001
Nagelkerke R square = 0.13    Degrees of freedom = 12    (1 – significance) = 1.0000					

Reference categories: (a): female; (b): no; (c): Totally disagree; (d): High-skilled white collar; (e): no; (f): no.

## Conclusions

Analysis of the PISA 2009 data regarding the use of private tutoring in the third and fourth years of middle school confirms the importance of the family background: independently of pupils' school performance, it is mostly their parents who decide on private tutoring, at times also at elementary school age.

The main reasons behind their choice appear to involve the logic of enrichment rather than remedying any gaps. The positive correlation between the family's socio-cultural background and the use of private tutoring is also confirmed. Thus private tutoring is not a prerogative of those who do not possess the intellectual resources to assist their children at school; on the contrary, it is more common among the better educated upper class families who seek to facilitate their children's access to those educational credentials which credentialist theoreticians (Collins, 1979) assert to be a means of cutting off certain classes from achieving the best positions.

In this paper we have taken for granted that private lessons can improve the performance of those who use them, even though the data available do not allow us to check their effectiveness. Other areas requiring further investigation include the quality of the school atmosphere, the student - teacher relationship and parents' satisfaction with the school.

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