Sense of belonging and transition to high schools in Peru

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Abstract

Sense of belonging is the degree in which students feel integrated with their peers and teachers at school. This study describes sense of belonging among Peruvian students entering high school. Socioeconomic status had no direct effect on sense of belonging but had an indirect effect through achievement. Rural students had higher sense of belonging than their urban peers. This is likely due to rural children seeing the larger, better equipped high schools as improvements over their relatively small and more isolated primary schools. Some general orientation activities were organized by teachers and principals aimed at all incoming first graders but nothing was designed specifically for students who might face difficulties in adjusting to high school.

Keywords: International education; Secondary schools; Psychosocial development; Social integration.

Acknowledgements

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1. Introduction

In the past few years, several authors have emphasized the importance of looking at psychosocial variables such as school engagement and sense of belonging as important educational outcomes in themselves, as well as being factors that could predict other outcomes such as educational achievement. Osterman (2000) has proposed that a sense of belonging to a community, such as a school, is a basic psychological need. Reviews of the international literature suggest that children with low sense of belonging feel alienated in schools (Juvonen, 2006). This in turn may lead to other negative consequences such as poor achievement and eventually dropping out of school. On the contrary, high sense of belonging may lead to higher motivation and grades. The main purpose of this paper is to describe which individual, family and primary school variables predict sense of belonging of school children entering first grade (seventh overall) of high school for the first time in Peru. We also describe their perceptions on how they are adjusting to high school, and whether or not schools have provided with support to help in this important transition. For this study we use a sub sample of children from the Young Lives (YL) project. YL is a longitudinal research project investigating the changing nature of childhood poverty. YL is tracking 12,000 children in Ethiopia, India (Andhra Pradesh), Peru and Vietnam over 15 years through a quantitative survey and participatory qualitative research[1]. For this study we used the data for a sub sample of the older cohort in the YL study (born in 1994) in Peru.

2. Sense of belonging

Sense of belonging has been related in the international literature to the degree in which people feel socially connected. This in turn has been found to be associated with outcomes such as mental and physical health and performance (Juvonen, 2006).

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[1] For more information about the study and publications see http://www.younglives.org.uk/.

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The current review focuses on social belonging in school. Children with low school sense of belonging report feeling unconnected and alienated. Juvonen (2006) has reviewed the literature and proposed a theoretical model where sense of belonging is associated with relationships with teachers and classmates, but also has a dynamic relationship with student behavior. In a similar way, Faircloth and Hamm (2005) have proposed a theoretical model where sense of belonging is associated with peer and teacher relations, perceived discrimination (i.e. belonging to an ethnic group that is somehow alienated), student motivation (i.e. efficacy beliefs and valuing of school activities) and time on extracurricular activities; in this model sense of belonging is a mediator variable to explain academic success.

School engagement is a construct that is closely related to sense of belonging, under the umbrella of a psychosocial perspective. It is conceived to be multidimensional, including behavioral, emotional and cognitive dimensions (Fredericks et al., 2004). Similar to sense of belonging, it has been conceived as a potential way to intervene in favor of higher student motivation and achievement. Ryan and Patrick (2001) have found that prior motivation and engagement in seventh grade predicted motivation and engagement in the following grade, although these were not related to age, gender or prior achievement. Furthermore, perceived teacher support was associated with higher motivation and engagement. However, the constructs of school engagement and sense of belonging do not seem to be always clearly differentiated in the literature. For instance Willms (2003) used students' sense of belonging and participation (defined as student attendance) to define student engagement in school.

While there have been a series of studies in Peru about factors related to student achievement in cognitive tests, school drop out and negative influence of child labor in academic achievement (Alcazar, 2008; Cueto, 2007), we have only found one study on sense of belonging: Willms (2003) did a study relating it with achievement for

all countries participating in the Programme for International Student Assessment (PISA) in 2000-2001. His analysis showed that Peru had one of the highest rates of low sense of belonging (37%) within the 41 countries evaluated. Sense of belonging and achievement were poorly correlated at the individual level but highly correlated when compounded at the school level. Finally, sense of belonging was associated positively with socioeconomic status. However, this study was cross-sectional and as such did not include transitions in school as a variable. Passing from one level to the next may have important implications for social and educational adjustment to schools, as suggested below.

2.1.   Transitions in school and sense of belonging

There are several international studies that have analyzed the transition from primary to middle or high school as an important challenge and/or threat (Sirsch, 2003), both socially and academically (e.g., Rice, 2001; Zeedyk et al., 2003). The challenges in this transition are associated with changes in the student at the physical level (i.e. entering puberty), socially (e.g. changes in relations with peers) and in adjusting to different school characteristics such as larger number of students and teachers, higher academic standards and changes in levels of autonomy and discipline required by students (Rice, 2001). International studies suggest that transitions across school levels may be associated with lower achievement (Rice, 2001; Zeedyk et al., 2003). Crockett et al. (1989) found that the higher the number of transitions experienced by a sample of children entering middle school in the US the lower the adjustment (defined by school grades and self-image); some gender differences in adjustment, favoring boys, were also found. Benner and Graham (2007) found that "ethnic congruence" (i.e. number of peers for African Americans in the same school) helped explain school sense of belonging in the transition to high school. Along these lines, Faircloth and Hamm (205) have found that the association between sense of belonging and other

variables may be different depending on the ethnic group of the student (9th to 12th graders).

Barber and Olsen (2004) found that students transitioning from sixth to seventh grade in the US reported decreased quality of the school environment and of academic, personal and interpersonal functioning, which could be related mostly to a new setup with larger classrooms and less teacher support. The patterns were similar for boys and girls, although some evidence for greater risk for the latter in personal and interpersonal functioning was found. The school environment is an important factor in this transition. For example, Juvonen (2006) reviews several studies in which helpful and encouraging environments ameliorate student's adaptability to school.

The summary presented above describes elements that help understand the transition from one school to another, particularly from middle school to high school, but most of these studies have been developed in educational systems that are quite different from the context in developing countries such as Peru. The next section presents some characteristics of the educational system in Peru, in particular about the transition from primary to secondary.

2.2.   *Transition to high schools in Peru*

Primary and secondary education are mandatory in Peru according to the Constitution, although no consequences are enforced if a child drops out of school. Primary education should start when the child turns 6 years of age and includes six grades. Secondary education has five grades. As in many other countries, the aim of secondary education is the integral development of children (cognitive, affective, physical and social dimensions) in order for them to acquire the abilities needed to continue with further studies or to pursue a job.

In 2006 in Peru there were 10,775 urban and 24,108 rural primary schools. However, for secondary there were only 6,339 urban and 3,978 rural schools[2]. In other words, there are far less schools in secondary than primary and the majority of primary schools are rural while the majority of high schools are urban. As expected from the above, secondary schools tend to have a much larger student enrollment and teacher staff than primary schools. Furthermore, primary schools may be either full grade (i.e. students in a classroom are all from the same grade) or multigrade (i.e. students in a classroom may be from two to six grades), while high schools are all full grade. In primary, teachers usually teach several subjects, while teachers in high school tend to specialize in subject areas. When finishing primary school, students sometimes continue high school in the same building (i.e. an integrated school, children are not transferred) or have to move to a different school. As in some of the international studies mentioned above, educational indicators of students entering high school in Peru are lower than either at the end of primary school or in the following high school grades. Table 1 presents national data for grade repetition and school dropout in Peru.

[INSERT TABLE 1 HERE]

School enrolment in Peru is very high; in 2006 97.8% of children of primary age were enrolled. For high school the percentage was 89.7% (INEI, 2007). However, the reasons for the relatively poor indicators of students entering high school are not well known and may have to do with the process of adjustment from primary to high school.

3. Research questions and design

The literature on school sense of belonging summarized above suggests that it is an important educational outcome in itself as well as a predictor of academic

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[2] Estimates by the authors based on school census; data available at www.minedu.gob.pe.

performance. It also suggests that individual factors such as prior school achievement, socioeconomic status and gender could help explain sense of belonging. The literature also suggests that moving from a primary school to a high school in a different building (i.e. not integrated) could be negatively associated with sense of belonging. Given that the current study is carried out mostly in public schools in Peru, where current indicators of poverty and child labor are high (Unidad de Estadística Educativa, 2005), we have also included child work to explore its association with sense of belonging. Thus the main research question posed here is "what are the individual, family and school factors that predict sense of belonging at the end of the first grade of high school?"

The data to analyze the research question stated above comes from surveys. However, we have also gathered information from students on their perceptions about the transition to high schools, as well as from their school teachers, through semi-structured interviews. Through these we want to explore how children think and feel they are adjusting to high school, as well as how do schools accommodate for the characteristics of children from different backgrounds entering high school.

For the analysis we have used survey data from YL's round 1 (collected in 2002) and round 2 (collected in 2006-2007, just prior to the students entrance into high school), and also survey and interview data collected at the end of 2007 (when YL´s children were finishing first grade in high school). The longitudinal nature of the quantitative data presented here is a contrast with most previous studies on this topic, which have used cross-sectional data.

4. Methods

4.1. Locations and participants

The study took place in four regions of Peru with families participating in the Young Lives (YL) longitudinal study: Ancash (provinces of Huaraz and Huaylas), Ayacucho (Huamanga and Lucanas), Junín (Satipo) and Piura (Sullana and Morropón). The areas were chosen intentionally using the following criteria:

- The selected province must have been included in the sample of YL.

- In each province there should be a group of Young Lives' children entering high school for the first time in 2007 (at least ten YL's children per province).

- There should be children within each region that came from integrated and non integrated schools.

- There should be children in each region that came from urban and rural schools that were in the boundaries of these areas.

- Finally, selected provinces must represent the geographical and cultural diversity of Peru. Therefore, provinces from different regions (coast, mountain and jungle), with people speaking different languages (Spanish and Quechua) were included in the sample.

However, in order to analyze the relative socioeconomic status of the 90 YL's children in the study we had to gather information from their peers. Thus, some of the variables were calculated using information from all other students in the same classrooms. Table 2 includes the number of students per province included in the study. The qualitative analysis is based on the 90 YL's children included in Table 2, while the quantitative analysis included only 80 of them that had complete information on all the variables considered for the analysis presented below.

[INSERT TABLE 2 HERE]

Table 3 includes information on some socioeconomic characteristics of the provinces the children came from (although the data we have for schools and students is not representative of any of the provinces).

[INSERT TABLE 3 HERE]

From the description aboe it is clear that this is not a nationally representative simple and hence external validity of the results is limited.

4.2.   Instruments

The main instruments used with the 90 YL's students were: round 1 YL survey (2002), where we gathered information on the individual and family background of the students (i.e. gender, age, maternal language, type and location of school attended by the child, materials used to build the house and parental education); round 2 YL survey (2006), where we gathered information on student work and achievement, measured with a 10 item test of number and number sense (covering topics included in the primary curriculum); finally, in 2007 we visited YL's students at their high schools by the end of the year and gathered information on: A) Sense of Belonging Scale: we used the Spanish version of the complete scale that had been already used in Peru (Willms, 2003). B) Student background questionnaire. C) Semi-structured Interview. This was administered individually to YL children only. The purpose was to get the perception of the students about their primary and high school experiences in both academic and social issues. We also gathered information on the schools and first grade classroom tutor's personal and professional background and on how did they handle students entering high school for the first time.

4.3.   Procedures

The survey data for rounds 1 and 2 of Young Lives was gathered by trained field workers in 2002 and 2006-2007 respectively. Additional data was collected by the end of the school year 2007 by field workers who were all participants in round 2 data collection for YL. The surveys in rounds 1 and 2 were administered individually to children at their homes, while in 2007 they were administered at home individually or at school in small groups, consisting of 3 to 5 children at a time, to assure that the instructions were understood. The surveys were administered in Spanish or Quechua (the main indigenous language in Peru) depending on the preferences of the child. The data collection procedures were supervised by the authors. Consent forms for YL children and their parents were collected for round 1 of YL and renewed verbally in round 2 and again in 2007. For non YL children, consent for administration was collected from school principals and tutors, assuring in all cases that results would be reported anonymously. The quantitative analysis was performed using the AMOS (version 6.0) software. The qualitative analysis consisted of a content analysis of the interviews and was performed using the Atlas.Ti (version 5.0) software.

5. Results

5.1. Descriptive analysis

Table 4 presents some demographic information on the children in the study, dividing children in those that have continued secondary in the same building (i.e. non-transferred) from those who moved to a different school in order to continue secondary (i.e. transferred). The data shows that children who were transferred are more likely to work outside home, speak Quechua and come from a rural area.

[INSERT TABLE 4 HERE]

Table 5 shows the differences children experience in some indicators when moving from primary to secondary schools. In general secondary schools are more urban, while the majority of transferred children studied primary in rural areas. Also, the number of teachers is larger in high school but this is more of a contrast for transferred children. Finally, transferred children take longer to get to secondary schools and are more likely to have studied with peers with an indigenous language (mainly Quechua) and attend high schools that are less likely to have a library, sport area and laboratory.

[INSERT TABLE 5 HERE]

5.1.1. Sense of belonging Scale

The Likert scale (i.e. children had to respond to each if they "Strongly disagree", "Disagree", "Agree" or "Strongly agree") used in this study comes from PISA (Willms, 2003). The original scale included 8 items, 3 positively and 5 negatively worded. We administered all of them in 2007 and asked students to respond about their sense of belonging during that year and also retrospectively for how they felt the year before (at the end of primary school). We found that reliability (Cronbach´s alpha) was higher for the negative items, so only these were included in the analysis (Primary school sense of belonging $\alpha=0.7104$; Secondary school sense of belonging $\alpha=0.7499$). The 5 items finally used in the analysis were "I feel like an outsider (or left out of things)", "I feel awkward and out of place", "I feel lonely", "I do not want to go to school", and "I often feel bored". The polarity of the negative items was reversed, so that a higher score in this scale indicated a higher sense of belonging. Table 6 shows the results (maximum possible score is 4 and lower is 1). Results show a relatively high sense of belonging and no statistically significant differences between transferred and non-transferred children. On average, sense of belonging was very similar at the end of primary school and first grade of high school.

[INSERT TABLE 6 HERE]

PISA 2000 established a score of 3 as cut off score. Table 7 shows the percent of students coming from each type of school above this score. Using the same cut-off score, Willms (2003) found 37% of a nationally representative sample of 15-year-olds of Peruvian students to have low sense of belonging. The figure is smaller for the current sample (24%).

[INSERT TABLE 7 HERE]

5.2.   Multivariate Analysis

The literature reviewed suggests that there are multiple channels (paths) to affect the children's sense of belonging. We used Structural Equation Models (SEM) given its flexibility and facility to distinguish between direct and indirect effects (Wolfe, 2003). It is important to emphasize that while SEM implies the establishment of causal relationships between variables in order to draw all the paths (hypotheses) that we want to test[3], we recognize the limitations for identifying a causal framework in our non-experimental research. The SEM used is a recursive model (without feedback loops among variables) and uses the following exogenous and endogenous variables, all treated as observed variables (measured without error):

Exogenous variables:

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[3] SEM tries to replicate the observed covariance matrix (data) estimating paths coefficients to minimize the difference (discrepancy) between the model-implied covariance matrix and the first one (Lei and Wu, 2007, p. 13).

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- Socio-Economic Status in 2002 (*SES*) – This score is the result of the sum of four dummy variables that indicate different aspects of socio economic status: 1) Mother with complete secondary education or more, 2) Housing without soil floor, 3) Housing with electricity and 4) Housing with sewage. The Cronbach's alpha for the index created is 0.7204. These variables were collected in the first round of YL (2002).

- Relative SES 2007 (*R. SES*) – This is a continuous variable specified as the child's socio-economic status in 2007 minus the mean SES of his/her secondary classroom in 2007. We calculated the child' SES in 2007 (Cronbach's alpha = 0.6380) in the same way as SES 2002.

- Sex (*SEX*) – Dummy variable that takes the value of 1 if the child is a boy.
- Urban area 2002 (*URBAN*) – Dummy variable that takes the value of 1 if the child lived in an urban area in 2002. The definition was taken from the National Statistics Office, i.e. urban children were those living in towns or cities with more than 2,000 persons.

Endogenous mediator variables:

- Mathematics score 2006 (*MATHS*) – This score is the result of the sum of ten items, scored 1 for correct and 0 otherwise, related to number and number sense (Cronbach's alpha = 0.7127).

- The child worked in 2006 (*WORKS*) – Dummy variable that indicates if the child had worked in the prior 12 months to get money or things for him/herself or her family outside home.

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- The child attends class regularly 2007 (*ATTEND*) – Dummy variable constructed using information provided by teachers. It takes the value of 1 if the child attended 80% or more of the class sessions during the school year.

- Non-transferred children 2007 (*NON TRANSF*) – Dummy variable that takes the value of 1 if the child studied the last grade of the primary and first grade of secondary in the same school.

Endogenous variable:

- Secondary school sense of belonging scale 2007 (*SENSE*) – This is the sum of the five items administered to children, after reversing the scores, mentioned before. However, we calculated a scale using factor analysis in order to generate a continuous variable. The resulting factor explained over 50% of the combined variance.

The equations for the model are presented in Appendix A. This set of equations is over identified with 19 degrees of freedom. The estimation procedure selected was maximum likelihood[4] and no irregularities (convergence problems, inadmissible solutions or empirical under-identification) occurred. Fit indices of the model show that our model must not be rejected under conventional values (Arbuckle, 2005): the probability level of the chi-square goodness of fit is 0.061 and the RMSEA is 0.08[5]. All the model coefficients are presented in the Appendix B (Table B1). The direct, indirect

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[4] Nevitt and Hancock (2004) suggest using this estimation method with small samples. Although they strongly advise evaluating the model through Satorra-Bentler k-factor corrected test statistic, we could not implement it. Nevertheless, we report another indicator recommended by Fan et al. (1999) that is not too sensible to sample size: RMSEA. Furthermore, we tested for normality and outliers by Mardia's coefficient (-1.2) and Mahalanobis d-squared, and did not find significant non-normality.

[5] Other indices were: GFI = 0.929; NCP =0.000; AGFI = 0.831; CFI = 0.874; IFI = 0.896; TLI = 0,762; Normed chi-square = 1,543.

and total effects of variables are in Table B2. Coefficients in Figure 1 represent standardized structural coefficients.

[INSERT FIGURE 1 HERE]

Having lived in urban areas during primary school years had a significant effect on sense of belonging, both directly (negative coefficient) and through being transferred (positive coefficient). Gender and SES have no direct effects on sense of belonging, although the relative SES of a student in his/her classroom has a positive association with the dependent variable. Also, SES is positively associated with achievement in mathematics and this variable in turn explains positively sense of belonging. Working and attendance have no direct or indirect effects on sense of belonging.

5.3.   Qualitative Analysis

In addition to the statistical analysis presented above, we also conducted a qualitative analysis of the semi-structured interviews with the 90 YL's students and their classroom tutors (n=39).

The interviews conducted with students were administered individually at their homes. The purpose was to get the perception of the students about their primary and high school experiences in both academic and social issues. Specifically, the semi-structured interview addressed issues such as characteristics of their schools (school and classroom climate, school's infrastructure and what they liked the most and least of their school); their relationship with their classmates (involving aspects such as how they get along with classmates, the possibility to ask their classmates for help with

academic or personal problems, and experiences of discrimination); their relationship with teachers (in aspects such as getting along with teachers, being treated fairly and receiving help with personal or academic problems) and their transition from primary school to secondary (specifically, the differences they found between primary and secondary school, their feelings of adjustment at the beginning and the end of the school year, the main changes faced during transition, and the people who helped them in their transition).

We also gathered information on the first grade classroom tutors' personal and professional background and how did they handle students entering high school for the first time. The interviews conducted with teachers were administered at school or at the teachers' home if they preferred so. Specifically, the semi-structured interview addressed issues such as teacher's background (personal information); their perception of the school (in terms of their relationship with other teachers, students and parents; their opinion about students' academic performance; and their expectations about student's academic future); and school's and teacher's response to student needs during transition to secondary school (involving aspects such as developing activities to orientate students entering first grade of secondary and also to promote integration between students; monitoring their achievement, and helping students with academic problems).

Students´ perception of school

The qualitative results suggest that most of the students like secondary school mainly because of three reasons. First, they seemed happy with their teachers because they are fun, dynamic and "*explain well*". Many students emphasized their teachers explain well because they repeat the lessons as many times as they need to

in order to understand the content. This creates an environment in which students feel confident and were they were able to understand and learn new things.

> Yes I like the teachers, I like their teaching, their attitude, their way of teaching because they explain well, we can express ourselves freely (Rural male student).

> (…) I understand what they [the teachers] explain to me. There I can express myself (…) I learn and feel more confident (Urban male student).

Second, they also like their peers because "*they are their friends and get along fine*". Students reported having fun at school and not getting bored mainly because they talk or play with other classmates. They even like it when teachers are late or don't come to class because it gives them the opportunity to play a basketball or football match at the patio with their peers.

> (…) my classmates are funny and joke a lot, so I don't get bored. Everything is good [at school] (Rural female student).

> It's fun being with my classmates. We all play, we talk…. We play (…) when teachers don't come (Urban female student).

> (…) my friends always make me feel good. They joke, make me laugh or we play together (Urban male student).

Third, students are very pleased with their schools' infrastructure because the classrooms have more space than their primary classrooms and there is a large patio. Some students also mentioned the fact that the school is cleaner, has freshly painted walls and was nicely decorated with murals. For students coming from primary rural

schools, the fact that their high school was made with bricks and concrete or had a library, computer lab and/or internet connection was also very valued. Below some quotes that illustrate the students' point of view:

The school is big and cozy. There you are safe because the roof is made with bricks so it won't fall down during an earthquake (Rural male student).

[What I like the most of my school] is the computers because I have already learned how to use them (Rural female student).

For playing and having physics education class [the school has a patio], it also has computer classes, a library and laboratories (Rural male student).

Sense of Belonging

In relation to the students' sense of belonging, we assessed it in the qualitative analysis based on students' report of their relationships with teachers and classmates (as suggested by Juvonen's model, 2006). We found that in general, students feel socially connected to and appreciated by their teachers and peers, and this is actually one of the main reasons they like secondary school.

This is an interesting result because several international studies that have analyzed transition from primary to middle or high school (e.g., Rice, 2001; Zeedyck et al., 2003) have found this experience to be very stressful for students because of their concern about peer relationships and bullying, among other reasons. Practically all the students in the sample mentioned they could count on their teachers and classmates to help them with academic problems; however, only a few said they would trust them

with their personal problems because they fear their peers or teachers might tell others about their problems. The following quotes illustrate how children established good personal links with peers:

I have got to know my classmates and I am happier. Sometimes we get together with the teachers; we play and laugh (…). I don't want it [school] to end (Rural female student).

When my classmates and I work together in a group, we help one another so we all can get good grades (Urban male student).

Although most of the students reported they usually help and were helped by others academically, it is worth commenting that a few students said they were mistreated by their peers both in academic and social situations because of their low SES. The following quotes illustrate this point:

My classmate once got mad. He didn't want to do homework with me because I was poor. He also told me I lived in a rustic house (Rural male student).

It was a little hard at the beginning because my classmates have a better economic position than mine, they live in urban areas. By now, they have adapted to me and vice versa. We get along fine (Rural male student).

The quantitative analysis presented earlier showed a direct effect of area of residence during primary school over students' sense of belonging, in favor of rural students. This result was unexpected because one would have anticipated urban students would be better adapted to secondary schools, considering most of these are located in urban areas, and urban students have most probably attended an integrated (primary and secondary) schools. Some insights from the qualitative analysis can shed light on this issue. Rural students seemed to have stronger relationships with their

peers in the sense that they meet outside school. For instance, some rural students reported they walk together every day to and from school. Others mentioned they work together with some of their classmates in agricultural tasks in their hometowns; or simply that they know other students because they live in their same community or in a neighboring one. Urban students on the other hand for the most part report that the only times they meet are while they are at school, in spite of being together with their classmates since the beginning of primary school.

Main changes faced by students during transition from primary to secondary school

Regarding the main changes faced during their transition to secondary school, most of the students agreed that the most challenging one was the increased number of teachers, especially during the first months of the school year. The most difficult aspects of having several teachers were "remembering their names and the subject they teach" and also the fact that "each of them gives them homework for the next class" so their workload had also increased. Another change faced by students was an increase in the number of students per classroom. Despite the initial shock, most of the students reported feeling good and getting along with their peers. They said that by talking, playing and lending and borrowing materials they needed for class (pencils, books, etc.) they came to know each other. Despite all the changes due to the transition, students seemed to be adapted to school and show a strong sense of school engagement which might be related to the fact that school environments are apparently characterized by caring and supporting relationships, a connection that has been previously suggested by other studies (see Juvonen, 2006):

I tried to meet more students. In sixth grade we were 19 students and now we are 31. I got used to them because I am still with my sixth grade classmates (Rural female student)

We talk to and meet our classmates who come from a different area. We ask them if they have wild animals in their communities and they tell us about that. Here in the school they speak Spanish but I do not know if they speak another language in their communities. I got used to them (Urban male student)

Two things should be noticed about this change reported by students. First, students meet peers from different backgrounds. The secondary schools we studied are located in urban areas and both urban and rural students attend them. Therefore every class has a mixture of students with different cultural backgrounds, places of residence, and maternal languages (i.e. Spanish or Quechua, although by high school all students speak fluently Spanish). Students seemed to react positively to the cultural diversity in their classrooms. Second, it is easier for students to adapt to their new classmates in general if some of their sixth grade classmates are in the same high school classroom. Students said they know and trust them and it is easier to meet new students if they do it together as a group. In addition to this, students mentioned that having an old friend was something good because they had someone to work together with in group assignments during the first weeks of the school year.

Despite all the challenges involved at the beginning of secondary school, by the end of their first year in high school, students report feeling adapted. For students coming from urban areas, having good relationships with teachers and peers is the main reason for this. Students coming from rural areas considered that having learned a lot through the year and being close to being promoted to second grade was a proof of their successful adaptation.

School's response to students needs

As mentioned before, schools seemed to be responding to students' needs during the transition to secondary school but with an emphasis on the classroom, not the individuals. Most of the interviewed teachers reported implementing some kind of activity to orientate students, mainly tutoring activities where they explained the challenges and changes students would face in secondary school and suggest ways to cope with them. Some teachers pointed out that these tutoring activities also extend to the parents in order to get their support:

> We talk to the students about the increase in the number of teachers in secondary school. We explain them that they will have more subjects, orient them about the classes they will have with each teacher and give them a schedule. We tell them than they will get used to these changes. We also have a meeting with their parents to explain the schedule and ask them to support their children (Female teacher from Ayacucho).

Teachers also implement activities to integrate students with their classmates, such as having diverse group activities where children have the opportunity to interact and get to know each other better by playing fun games, doing school work, celebrating birthdays or simply introducing themselves to the rest of the class. Activities outside school are also implemented by teachers. These include going out to the street or the park to collect garbage, class trips to visit tourist attractions, sports tournaments between sections or between schools, and cultural activities such as dance, theatre and music.

We also asked the classroom tutors about their strategies to monitor and improve students' achievement. The teachers explained they monitor students' achievement basically through oral or written evaluations taken continuously or at the end of two month periods. When an achievement problem is detected, the strategies most commonly reported by teachers were having additional classes after school hours

during the academic year to reinforce different subjects, call the student's parents for a meeting in order to get their support or talking directly to students. Having additional classes seems like a common practice but only during the academic year. Most of the teachers reported it was very unlikely to have extra classes during holidays (either in winter or summer) mainly because many teachers return to their home cities or children are busy working.

> In my case, I come Saturdays and Sundays. I come to help those students who are lagging behind in themes or subjects they require. This is free; it's to help the students (Male teacher from Satipo).

Teachers' strategies aimed at monitoring and improving students' achievement seemed to be more targeted at some students (i.e. remedial classes after school hours are only for students with achievement problems) than activities and strategies devoted to orientate and integrate the students during their transition process. Nevertheless, we found no evidence within teachers' discourse of individual attention to students needs, aside from eventual visits of the teacher to the student's home. Individual tutoring sessions for students with specific social or academic problems are not a common practice in the schools visited.

6. Discussion

Recently, psychosocial research in education has emphasized the importance of studying further school and student characteristics that are related to social and affective dimensions. Among these, sense of belonging to schools is related to studying when and how social connections among students and with their teachers are developed (Juvonen, 2006). There have been several studies of predictors, factors associated with, and outcomes related to sense of belonging. In the current study we

have studied sense of belonging during a time when it could suffer, which is the transition from primary to high school (Rice, 2001). Several authors have described the challenges students face in this transition, related both to changes in the individual, such as physical, psychological and physical changes associated with puberty, and the school environment, such as having to meet new friends, new teachers and new subject matters in an overall school climate that could differ significantly from prior experiences (Sirsch, 2003). The current study describes sense of belonging among Peruvian students who come from different family and school backgrounds and are finishing first grade in high school for the first time.

Most students show relatively high sense of belonging and feel quite happy to be in high school. They think that the larger and stronger buildings, having more peers, and having specialized, fun, knowledgeable teachers make for a better environment than the one they had in primary schools. The quantitative analysis showed that socioeconomic status (SES) has no direct effect on sense of belonging but has an indirect effect through its influence on achievement: students who got a higher score on a mathematics test at the end of primary school showed later higher sense of belonging in first grade in high school. Hence, achievement is related to feeling socially connected. This is contrary to Willms (2003) results in Peru for similar variables, who found no association between sense of belonging and achievement at the individual level. Theoretical models however would predict such an association between achievement and sense of belonging (Juvonen, 2006). Additionally, SES was associated to sense of belonging as a relative measure of the individual's status in his or her classroom. Hence, students with relatively low SES in the classroom (defined through parental education and house characteristics) had lower sense of belonging than their peers. The association is relatively weak ($p < 0.1$) but suggests that students that come from relatively poorer families feel somewhat less connected in their school environment. SES has been found to be associated with several other outcomes in

Peru, such as achievement in mathematics and language arts (Cueto, 2007), suggesting it is a strong predictor of educational outcomes. A few students reported being discriminated for being poor, although this was not a common report by students. Thus it would seem that for the most part relatively poor students are not openly discriminated but still feel less connected in their schools. Ma (2003) however did not find a strong association between SES and sense of belonging or academic achievement for 6th and 8th grade students in Canada; in her study sense of belonging was associated mainly with self-esteem and general health of the students, two variables that were not included in this study.

Regarding other variables analyzed statistically, sex, work and attendance to school were not associated with sense of belonging. Personal reports from students also showed no connection between these and sense of belonging. Students who were transferred from a primary school to a different secondary building showed no differences in sense of belonging with their peers when unadjusted means were compared; in the multivariate analysis there was a small positive effect ($p<0.1$) of not being transferred on sense of belonging. It would seem that being or not transferred is not what explains sense of belonging for the most part but the fact that at least some fellow students are transferred together.

Contrary to what we anticipated, rural students had higher sense of belonging than their urban peers. While we had no prior studies in Peru to support a hypothesis, we anticipated that urban students would have higher sense of belonging given that high schools are located in larger (more urban) cities and students from urban backgrounds would feels less of a change (even if transferred) than rural students who had completed primary in smaller, more isolated schools. This result could be explained through the testimonies of children in the interviews we conducted with them: according to them, rural children have faced greater changes in the physical

characteristics of the schools (larger, more secure, made of durable materials), the increased number of teachers, subject areas and peers, but still are happier to see the changes which they value as improvements. In spite of this they tend not to feel alienated because they value this as an improvement in their school conditions (which are probably also quite a contrast to the ones they face at home). Also, many rural students have for the most part moved on to high schools with some of their peers from primary schools (high schools are scarce in rural areas). According to their testimonies, urban students for the most part do not openly discriminate rural students and this may also help with social connections in high school. On the contrary, urban students reported not being as much engaged with their peers outside school as rural students (for instance, rural students have to walk back and forth to school every day for longer time than urban students, and they usually report doing this in groups). Most students reported some initial difficulties in coping with the new high school environments, but by the time we interviewed them (i.e. end of first grade in high school) they felt adapted. It is important to note that this study was conducted in urban and rural schools that were in the boundaries of these areas. The results could be quite different if the study were conducted in large cities, such as Lima, that would have little connections between urban and rural students. The schools we went to frequently receive both urban and rural students.

We also inquired on the tutors' and schools' measures to make new students feel welcome. Most tutors reported giving some general orientation activities, aimed at all first graders. Nothing specifically was designed for groups of students (especially those transferred and/or coming from rural environments). Nothing was planned either to identify or help individual students with difficulties to integrate with their peers. The only extracurricular activities reported by teachers were aimed at students with low achievement. Thus, social integration or the influence of social and affective educational outcomes, does not seem to be high in the priorities of the teachers we

visited, but still, students manage to form groups and for the most part develop a sense of belonging based on the high value they attribute to being in high school and the fact that they have peers who they have known for long transitioning with them to high school.

Appendix A. Structural Equations

[INSERT TABLE A1 HERE]

Although **AMOS^{TM} 6.0** assumes that all the equations contain an intercept, the program usually does not estimate it (Arbuckle, 2005, p. 227). In our case, we do not have a special interest over the intercepts and that is why we did not include them. The symbol ρ represents the paths coefficients and the letter d the error terms.

Equation for Maths:
$V5 = \rho_{6,1} V1 + \rho_{6,3} V3 + D2$ (Eq.A.1)

Equation for Works:
$V6 = \rho_{7,1} V1 + \rho_{7,3} V3 + D3$ (Eq.A.2)

Equation for Attendance:
$V7 = \rho_{8,7} V6 + \rho_{8,1} V1 + D4$ (Eq.A.3)

Equation for Non Transferred:
$V8 = \rho_{9,4} V4 + D5$ (Eq.A.4)

Equation for Sense:
$V9 = \rho_{11,2} V2 + \rho_{11,6} V5 + \rho_{11,1} V1 + \rho_{11,3} V3 + \rho_{11,7} V6 + \rho_{11,8} V7 + \rho_{11,4} V4 + \rho_{11,9} V8 + D1$ (Eq.A.5)

Appendix B. Structural Coefficients and Effect Decomposition

[INSERT TABLE B1 HERE]

[INSERT TABLE B2 HERE]

References

Alcazar, L., 2008. Asistencia y desercion en las escuelas secundarias rurales del Peru. [Assistance and drop out at secondary rural schools of Peru]. In: Benavides, M. (Ed.), *Analisis de programas, procesos y resultados educativos en el Perú. Contribuciones Empiricas para el Debate.* [Program analysis, process and educative results in Peru. Empiric contributions for the debate.]. GRADE, Lima, pp. 41-82.

Arbuckle, J.L., 2005. *Amos 6.0 Users Guide*, Springhouse, PA: Amos Development Corporation.

Barber, B.K., Olsen, J.A., 2004. Assessing the Transition to middle and High School. *Journal of Adolescence Research 19 (1)*, 3-30.

Benner, A.D., Graham, S., 2007. Navigating the Transition to Multi-Ethnic Urban High Schools: Changing Ethnic Congruence and Adolescents' School-Related Affect. *Journal of Research on Adolescence 17 (1)*, 207-220.

Crocket, L.J., Petersen A.C., Graber J.A., Schulenberg, J.E., Ebata, A., 1989. School Transitions and Adjustment during Early Adolescence. *The Journal for Early Adolescence 9 (3)*, 181-210.

Cueto, S., 2007. Evaluaciones nacionales e internacionales de rendimiento escolar en el Perú: balance y perspectivas. In: Grupo de Análisis para el Desarrollo (Ed.), *Investigación, Políticas y Desarrollo en el Perú.* [National and international evaluations of school achievement in Peru: Balance and Perspectives. In: Group of Analysis for Development (Ed.) *Research Politics and Development in Peru*]. GRADE, Lima, pp. 405-456.

Fan, X., Thompson, B., Wang, L., 1999. The effects of sample size, estimation methods, and model specification on SEM fit indices. *Structural Equation Modeling: A Multidisciplinary Journal 6 (1)*, 56-83.

Faircloth, B. S. and Hamm, J. V., 2005. Sense of belonging among high school students representing four ethnic groups. *Journal of Youth and Adolescence 34* (4), 293-309.

Fredericks, J.A., Blumenfeld, P.C., Paris A.H., 2004. School engagement: Potential of the concept, state of the evidence. *Review of Educational Research 74 (1)*, 59-109.

Instituto Nacional de Estadistica e Informatica (INEI), 2007. *Perú: Compendio Estadístico 2007*, Instituto Nacional de Estadistica e Informatica. *[Peru: Statistical Compendium 2007, National Institute of Statistics and Computing]*, Lima.

Instituto Nacional de Estadistica e Informatica (INEI), 2005. *Censos Nacionales 2005: X de Población y V de Vivienda.* INEI. *[National Census 2005: X of Population and V of Houses]*. Lima.

Juvonen, J., 2006. Sense of Belonging, Social Bonds, and School Functioning. In: Alexander, P., Winne, P. (Eds.), *Handbook of Educational Psychology*, second ed. Macmillan, New York, pp. 655-674.

Lei, P.W., Wu, Q., 2007. Introduction to structural equation modeling: Issues and practical considerations. *Educational Measurement: Issues and Practices 26 (3)*, 33-43.

Ma, Xin, 2003. Sense of belonging to school: Can schools make a difference? *The Journal of Educational Research 96* (6), 340-349.

Nevitt, J., Hancock, G., 2004. Evaluating Small Sample Approaches for Model Test Statistics in Structural Equation Modeling. *Multivariate Behavioral Research 39 (3)*, 439-478.

Programa de las Naciones Unidas para el Desarrollo, PNUD, 2008. *Cifras para la Descentralización: Versión Temática, Cuadernos PNUD Serie Desarrollo Humano Nro. 13.* [*Figures for Decentralization. Thematic Version. Human Development Series # 13, UNDP Peru*]. Lima.

Osterman, K.F., 2000. Students' Need for Belonging in the school Community. *Review of Educational Research 70 (3)*, 323-367.

Rice, J.K., 2001. Explaining the Negative Impact of the Transition from Middle to High School on Student Performance in Mathematics and Science. *Educational Administration Quarterly 37 (3)*, 372-400.

Ryan, A.M., Patrick, H., 2001. The Classroom Social Environment and Changes in Adolescents' Motivation and Engagement during Middle School. *American Educational Research Journal 38 (2)*, 437-460.

Sirsch, U., 2003. The impending transition from primary to secondary school: Challenge or threat?. *International Journal of Behavioral Development 27 (5)*, 385-395.

Unidad de Estadística Educativa, 2005. *Indicadores de la Educación Perú 2004*, Ministerio de Educacion de Perú. *[Indicators of Peruvian Education 2004, Peru's Ministry of Education],* Lima. From <http://escale.minedu.gob.pe/escale/publicaciones/indicadores2004.do>.

Willms, J.D., 2003. *Student Engagement at school. A sense of Belonging and participation Results From PISA 2000*, OECD. From <http://www.oecd.org/dataoecd/42/35/33689437.pdf>.

Wolfle, L.M., 2003. The introduction of path analysis to the social sciences, and some emergent themes: An annotated bibliography. *Structural Equation Modeling 10 (1)*, 1-34.

Zeedyk, M.S., Gallacher, J., Henderson, M., Hope, G., Husband, B., Lindsay, K., 2003. Negotiating the Transition from Primary to Secondary School. *School Psychology International 24 (1),* 67-79.

Fig. 1. - Path diagram employed to explain Sense of Belonging and standardized structural coefficients
+ Statistically significant at the .10 level.
* Statistically significant at the .05 level.
** Statistically significant at the .01 level.

Table 1
School indicators for Peru, 2005

	Enrolment (thousands)	Promoted (%)	Repeated (%)	Dropped out (%)
Primary:				
1st	658.4	89.4	0.4	5.1
2nd	713.3	81.2	13.0	3.7
3rd	703.9	84.6	10.4	3.2
4th	680.2	87.7	7.8	3.2
5th	653.7	88.7	6.7	4.0
6th	604.0	92.9	3.2	3.8
High school:				
7th	571.5	83.1	10.6	8.7
8th	523.0	84.5	9.9	6.4
9th	464.3	84.5	9.5	7.4
10th	417.7	86.6	7.9	6.9
11th	394.6	89.1	6.6	8.3

Source. – Censo Escolar 2006 (Database). Ministry of Education.

Table 2
Locations and Participants of the Study

Province	Young Lives´ Children	Non Young Lives´ Children	Principals of Secondary Schools	Home Room Teachers of Secondary Schools
Huaraz	12	237	6	7
Huaylas	10	42	3	3
Huamanga	9	131	5	5
Lucanas	14	89	4	5
Satipo	20	306	5	11
Morropon	11	67	2	3
Sullana	14	124	5	5
Total	90	996	30	39

Table 3
Socio economic characteristics of selected provinces

Province	Population in rural areas (%)	Housing with soil floor (%)	Housing without electricity (%)	Housing without water (%)	Housing without sewage (%)	Illiteracy rate	HDI Ranking (2005)
Huaraz	34.2	51.2	18.0	11.2	38.6	15.6	33
Huaylas	67.7	73.3	43.8	24.8	70.8	26.9	105
Huamanga	31.5	56.8	35.2	20.1	48.0	18.2	19
Lucanas	49.2	89.3	53.1	31.7	80.9	20.5	91
Satipo	75.1	67.0	65.2	60.0	72.3	21.9	61
Morropon	43.2	77.4	53.2	42.7	80.6	19.2	27
Sullana	11.6	52.9	30.0	32.1	44.9	12.3	13
Peru	28.9	41.5	27.6	27.8	43.9	13.1	-

Sources. – *Censos Nacionales 2005: X de Población y V de Vivienda*. INEI; *Cifras para la Descentralización: Versión Temática, Cuadernos PNUD Serie Desarrollo Humano Nro. 13*. PNUD Peru.
Note. – The Human Development Index (HDI) was calculated by the Peruvian Office of the United Nations Development Program. They used as input the National Census 2005 database. In this table we put the ranking of the provinces according with the HDI. The ranking takes values between 1 (more developed province) and 195 (less developed province).

Table 4

Mean (Standard Deviation) of Demographic Characteristics of the Sample by Group of Study

	Non Transferred Children	Transferred Children	Total
Child Characteristics:			
Age (in years)	12.5[a]	12.4[a]	12.4
	(0.7)	(0.5)	(0.6)
Male (%)	40.6[a]	60.4[a]	52.5
	(49.9)	(49.4)	(50.3)
Works outside family home, 2006	6.3[a]	31.3[b]	21.3
	(24.6)	(46.8)	(41.2)
Mathematics Achievement, 2006	7.5[a]	6.9[a]	7.1
	(1.6)	(2.0)	(1.9)
Lived in urban area in 2002	62.5[a]	27.1[b]	41.3
	(49.2)	(44.9)	(49.5)
Spanish as mother tongue (%)	100.0[a]	83.3[b]	90.0
	(0.0)	(37.7)	(30.2)
Family Characteristics:			
Mother with completed secondary education or more (%)	32.3[a]	29.2[a]	30.4
	(47.5)	(45.9)	(46.3)
Socio-Economic Status in 2002	1.6[a]	1.0[a]	1.3
	(1.5)	(1.1)	(1.3)
House Characteristics, 2007:			
Housing with soil floor (%)	40.6[a]	54.2[a]	48.8
	(49.9)	(50.4)	(50.3)
Housing with electricity (%)	84.4[a]	79.2[a]	81.3
	(36.9)	(41.0)	(39.3)
Housing with sewage (%)	37.5[a]	43.8[a]	41.3
	(49.2)	(50.1)	(49.5)
N	32	48	80

Note. – We identified statistically significant differences between groups using the Kruskal-Wallis one-way analysis of variance. Similar superscripts indicate there are no significant differences ($p > 0.05$).

Table 5
Mean (Standard Deviation) of Primary and Secondary School's Characteristics by Group of Study

	Primary School			High School		
	Non Transferred Children	Transferred Children	Total	Non Transferred Children	Transferred Children	Total
Walk to school	84.4 [a]	91.7 [a]	88.8	84.4 [a]	77.1 [a]	80.0
	(36.9)	(27.9)	(31.8)	(36.9)	(42.5)	(40.3)
15 minutes or less from home to school	78.1 [a]	75.0 [a]	76.3	78.1 [a]	56.3 [b]	65.0
	(42.0)	(43.8)	(42.8)	(42.0)	(50.1)	(48.0)
School in urban area[1/]	59.4 [a]	33.3 [b]	43.8	59.4 [a]	54.2 [a]	56.3
	(49.9)	(47.6)	(49.9)	(49.9)	(50.4)	(49.9)
Public School[1/]	96.9 [a]	100.0 [a]	98.8	96.9 [a]	93.8 [a]	95.0
	(17.7)	(0.0)	(11.2)	(17.7)	(24.5)	(21.9)
Number of teachers[1/]	19.7 [a]	13.9 [a]	16.2	25.8 [a]	22.5 [a]	23.8
	(16.3)	(10.7)	(13.5)	(23.3)	(18.1)	(20.2)
Number of students[1/]	504.3 [a]	394.7 [a]	438.5	420.7 [a]	433.1 [a]	428.2
	(479.9)	(385.5)	(426.3)	(442.6)	(396.8)	(413.0)
Percentage of peers with Spanish as mother tongue[1/]	99.6 [a]	61.9 [b]	77.0	99.1 [a]	77.7 [b]	86.2
	(1.8)	(48.4)	(41.8)	(4.4)	(38.5)	(31.7)
Had to move for studying secondary education				3.1 [a]	8.3 [a]	6.3
				(17.7)	(27.9)	(24.4)
Secondary school walls are made of brick and concrete				75.0 [a]	66.7 [a]	70.0
				(44.0)	(47.6)	(46.1)
Secondary school has library, sport area and laboratory				68.8 [a]	20.8 [b]	40.0
				(47.1)	(41.0)	(49.3)
N	32	48	80	32	48	80

Sources. – Field work 2007; Censo Escolar 2006 (Database). Ministry of Education
Note. – We identified statistically significant differences between groups using the Kruskal-Wallis one-way analysis of variance. Similar superscripts indicate there are no significant differences ($P > 0.05$).
[1] Information for schools where the children study was provided by the Ministry of Education.

Table 6

Average Score (Standard Deviation) in Sense of Belonging Scale by Group of Study

	Non Transferred Children	Transferred Children	Total
Primary School Sense of Belonging	3.1 [a]	3.2 [a]	3.1
	(0.8)	(0.6)	(0.7)
Secondary School Sense of Belonging	3.3 [a]	3.2 [a]	3.3
	(0.6)	(0.5)	(0.6)
N	32	48	80

Note. – We identified statistically significant differences between groups using the Kruskal-Wallis one-way analysis of variance. Similar superscripts indicate there are no significant differences ($p > 0.05$).

Table 7

Percentage (Standard Deviation) of Children above Pisa's Cut-Off Score by Group of Study

	Non Transferred Children	Transferred Children	Total
% of children with sense of belonging score $\geq$ 3	81.3 [a] (39.7)	72.9 [a] (44.9)	76.3 (42.8)
N	32	48	80

Note. – We identified statistically significant differences between groups using the chi-square test. Identical superscripts indicate that there are no significant differences (p>0.05).

Table A1
Variables Included in the Model

Variable	Path Diagram Label	Equation Label
Socio-Economic Status, 2002	SES	V1
Relative SES, 2007	R.SES	V2
Sex	SEX	V3
Urban area, 2002	URBAN	V4
Mathematics score, 2006	MATHS	V5
The child works in 2006	WORKS	V6
The child attended class regularly, 2007	ATTEND	V7
Non transferred children, 2007	NON TRANSF	V8
Secondary school sense of belonging scale, 2007	SENSE	V9

Table B1
Structural Coefficients

	Structural Coefficient		Std. Structural Coefficient	
Mathematics score:				
Socio-Economic Status	0.603	**	0.409	**
Sex	0.443		0.119	
Works:				
Socio-Economic Status	-0.043		-0.132	
Sex	0.152	+	0.185	+
Attendance:				
Works	-0.304	**	-0.304	**
Socio-Economic Status	0.052		0.16	
Non transferred children:				
Urban area	0.367	**	0.371	**
Secondary school sense of belonging:				
Mathematics score	1.176	*	0.244	*
Relative SES	1.654	+	0.189	+
Socio-Economic Status	0.857		0.121	
Attendance	-0.325		-0.015	
Non transferred children	3.459	+	0.188	+
Urban area	-5.909	**	-0.325	**
Sex	-1.146		-0.064	
Works	2.018		0.092	

+ Statistically significant at the .10 level.
* Statistically significant at the .05 level.
** Statistically significant at the .01 level.

Table B2
Direct, Indirect and Total Effects

	Std Direct Effects	Std Indirect Effects	Std Total Effects
Mathematics score:			
Socio-Economic Status	0.409	0	0.409
Sex	0.119	0	0.119
Works:			
Socio-Economic Status	-0.132	0	-0.132
Sex	0.185	0	0.185
Attendance:			
Works	-0.304	0	-0.304
Socio-Economic Status	0.160	0.040	0.200
Sex	0	-0.056	-0.056
Non transferred children:			
Urban area	0.371	0	0.371
Secondary school sense of belonging:			
Mathematics score	0.244	0	0.244
Relative SES	0.189	0	0.189
Socio-Economic Status	0.121	0.085	0.205
Attendance	-0.015	0	-0.015
Non transferred children	0.188	0	0.188
Urban area	-0.325	0.070	-0.255
Sex	-0.064	0.047	-0.017
Works	0.092	0.005	0.097