Immigrant students in Spain compared to Spanish students: Perceived relationships and academic results

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ABSTRACT: Personal relationships are central to adolescent students’ lives, not just the relationships in which they themselves are involved but also those that unfold around them. This study considers immigrant and Spanish adolescents’ views about the “community dimension of school climate”, centered on family-school relationships and school relationships, and how these relate to their academic results. Seven hundred and forty-five (745) students living in Galicia, Spain, participated in the study. Their ages ranged from 12 to 18 years old (M = 14.5, SD = 1.67). Spanish students accounted for 81% of the sample, while 19% were immigrant students. There were statistical differences between Spanish and immigrant students in their perceived family-school relationships, however this did not impact significantly on their academic results. For immigrant students, the sole variable “school relationships” accounted for 20% of their academic results. For Spanish students, this variable together with students’ age and parental education accounted for 27% of their marks. Results emphasize the relational impact of the perceived processes going on inside the schools and point at the importance that investing in school relationships might have in students, especially when they are immigrants.

KEYWORDS: Immigrants, High school students, Family-school relationship, School relationship, School climate.
relationships inside the school, students’ connectedness - described by the authors as the sense of attachment that students experience when they feel accepted, and respect for diversity.

This paper delves into the first three relational processes of school climate from the point of view of the students themselves, in order to compare immigrant and Spanish adolescents’ perspectives on these processes and their impact on academic results. As migration encompasses multiple interpersonal loses and gains, relationships and connectedness are meaningful variables for migration studies and adolescents’ development and education. A growing body of literature considers adolescents’ understandings of relationships. However, there is limited research on how the quality and quantity of these relationships impact on academic achievement. As Bear et al. (2014) have pointed out, perceived relationships inside the schools have been scarcely studied outside USA.

• MIGRATION IN SPAIN AND GALICIA

Migration changes people’s lives. As the person and its family moves to another country, various interpersonal and contextual losses and gains happen. For years, Spaniards have migrated to many regions of the world, but for the last three decades the country has experienced an important increase of its foreign population (Essomba, 2012; Santos-Rego, Crespo-Comesaña, Lorenzo-Moledo & Godás-Otero, 2012). In the early 1990s, young adults moving for labor reasons and North-European pensioners settled in Spain. Since then, many non-European immigrants (mainly from Latin-American countries and Morocco) started to arrive (Terrén & Carrasco, 2007). Migration to Spain has experienced a decrease (-0.7%) due to the adverse economic situation although figures have been increasing again since 2014 (Instituto Nacional de Estadística, 2018). Alongside these decreases and increases, immigrant students have been attending Spanish schools. Galicia, the region in Spain where this study was conducted, has a proportion of foreign students that is smaller than the mean proportion for the whole country, 2.8% according to the Spanish Government (Ministerio de Educación y Formación Profesional, 2018), because the distribution of immigrant population is uneven across the country (Vaquera & Kao, 2012).

No substantial differences have been found in previous studies in the academic performance that immigrant students attain compared to Spanish students in Galicia (Santos-Rego et al., 2012), even when differences do appear in other Spanish regions (Poveda, Jociles, & Franzé, 2014). Reasons for this are the small proportion of immigrant students, the provisions of the local authorities to support them, teacher training (Hombrados-Mendieta & Castro-Travé, 2013), and a safer and conflict-free environment at schools (Álvarez, 2014). Galicia is the Spanish region with the least academic performance variations based on socioeconomic status (SES) (Cabrera, 2016).

• IMMIGRANT STUDENTS AND IMMIGRANT FAMILIES AT SCHOOL: RELATIONSHIPS

Through the migratory process, there is a need to adapt to a new cultural environment (Georgiades, Boyle, & Fife, 2013); and school is definitely a new cultural environment that children and families have to relate to when there are school age children. Both the newcomers and the schools need to adjust. Immigration means that school-age children and adolescents enter an education system that is different from the one their parents and themselves know. There are differences in school routines and practices, in the way parents and teachers communicate and in what schools expect from parents (Garreta Bochaca, 2009). Although Spanish teachers have positive opinions about immigrant parents and their children (Crespo, Rubio, López & Padrós, 2012), there are some obstacles in the relationships between immigrant parents and schools involving parents’ participation. Immigrant parents seem to participate less than Spanish parents (Garreta Bochaca, 2008; Santos-Rego & Lorenzo-Moledo 2009), choosing more private ways to get involved in their children’s education. They do not attend many school meetings and prefer individual encounters with teachers (Terrén & Carrasco, 2007) partially due to scarce language proficiency, to teachers’ stereotypes about parents and vice versa,
or to parents’ expectations about their own involvement (Amigó, 2017; Garreta Bochaca, 2008; González-Castro, Ubillos, Bilbao, & Techiob, 2009; Santos-Rego & Lorenzo-Moledo 2009; Terrén & Carrasco 2007). As Nzinga-Johnson, Baker and Aupperlee (2009) have pointed out, language, school practices and previous experiences are some of the barriers to minority parent involvement.

While immigrant parents’ participation is lower compared to Spanish parents, previous studies in Spain have found that first generation immigrant students engage in fewer peer relationships and these occur usually within their own cultural group (Giró 2011; Hombrados-Mendieta & Castro-Travé 2013). López-Larrosa, Barrós, Amigó, & Dubra (2015) found that immigrant students felt significantly less connected with their peers and this partially explained their academic results. The importance of school-related relationships for immigrant students has only recently begun to be addressed. In the European scene, Mantovani and Martini (2008) have established significant associations between friendships within the classroom and the academic performance of immigrant students. Romero-Oliva et al (2017) informed of positive relationships between perceived school environment and academic results. In USA, Lee Kim & Na’im (2018) reported on lower levels of academic achievement. in immigrant students who perceived more negative interpersonal relationships with peers. Also, supportive relationships with teachers relate to better academic performance (Juang et al., 2018). Meaningful personal relationships that enhance a sense of belonging are crucial for being motivated for learning (Juang et al., 2018; Oostdam & Hooge 2013). The study by Mantovani and Martini echoes some of the findings that will be presented in this article and is an indication of the importance of considering relationships when exploring school performance (Juang et al., 2018). Proximal relations at school play a significant role in immigrant students’ achievement. In fact, one of the dimensions of academic engagement is relatedness to peers, teachers and the school (Kim & Suárez-Orozco, 2014; Schneider, 2016).

**IMMIGRANT STUDENTS AND IMMIGRANT FAMILIES AT SCHOOL: ACADEMIC RESULTS AND RELEVANT EXPLANATORY VARIABLES**

There are myriad studies delving into the range of variables that operate simultaneously in relation to how well foreign students adjust to school (Amigó, 2017). Most of these studies are based on North American migration, but there is also a significant body of literature that concentrates on the European and Australian scenarios. Interestingly, however, despite the huge amount of work done in this area, research is still inconclusive in relation to what combination of variables affect immigrant children and adolescents’ educational achievement. School achievement is a key measure of immigration success (Crul, 2007). School is the subject of high aspirations and a priority for both the parents and their children (Amigó, 2017; Passani & Rydin, 2004; Sung & Chang, 2008). The socioeconomic background of immigrant parents has been identified as a determinant of their children’s educational success (Zhou & Kim, 2006). But immigrant parents with high aspirations and who place a crucial value in education can make a significant positive impact in how their children will perform at school, regardless of their sociocultural background (Aldous, 2006). This has been the case for immigrants of Asian background (Bhattacharya, 2000; Cherng & Liu, 2017). Within the paradigm of the model minority (immigrant children who excel academically regardless of parental socioeconomic and educational background), Li (2004), focusing on young Chinese pupils, has discussed the impact of cultural frameworks in enabling a positive disposition to learning. This line of thought has been thoroughly investigated by Watkins and Noble (2013) who, after acknowledging the connections between ethnicity and educational achievements for some groups, contended that these associations cannot be made without an understanding of the complex links between socioeconomic status, ethnicity and ‘educational capital’ (the knowledge, skills and cultural values which are embodied by students and determine a specific approach towards formal education).

Although marginally discussed in the literature, age is a variable that should be
taken into account as a key aspect of immigrant students’ adjustment to school. Some research has concentrated on age at immigration showing that the older the students are at the time of immigration, the lower the educational achievement, especially when students need to learn the language of the host country (Böhlmark, 2009; Cahan, Davies & Stauub, 2001; Juang et al., 2018). Also, the onset of puberty has been related to a decrease in academic motivation and academic achievement regardless immigration status (Martin & Steinbeck, 2017).

An interesting body of research has discussed how gendered social expectations determine boys’ attitudes to schooling and learning compared to girls (see for example Pascoe, 2007). In the United States, several studies on immigrant children and youth follow the national trend where immigrant boys underperform immigrant girls (e.g. Suárez-Orozco & Qin-Hilliard, 2004). Similar gender patterns in educational outcomes among North African immigrant students have been found in Europe (Haw, Shah, & Hanifa, 1998). Suárez-Orozco and Qin-Hilliard (2006) report on a few studies that could illuminate the possible reasons for the gendered discrepancy in relation to performance, such as the supportive nature of girls’ peer relationships and those with their teachers, besides the highly gendered nature of schools where females are disproportionately represented, and therefore seemingly better contained. Immigrant boys would be more prone to perceiving educational institutions as a threat to their identity while girls build better relationships with other girls than boys do (Velasquez, 2011). This takes us back to the point that relationships should be considered as a core variable in our understanding of the academic achievement of immigrant students (Juang et al., 2018).

**RESEARCH QUESTIONS**

This study focuses on adolescents’ voices in relation to the following questions: How do immigrant high school students perceive family-school relationships and their own school relationships compared to Spanish students? Are there any differences in their academic achievement? Which variables may relate to academic results in the student migrant population compared to the non-migrant one: perceived relationships, parental education or students’ age or gender?

**METHOD**

**PARTICIPANTS**

Seven hundred and forty-five students (745) from four rural and urban public high schools in Galicia, in Spain’s Northwest, participated in the study. Education is compulsory in Spain until the age of 16 years and the majority of adolescents in this region attend public high schools ranging from 69.4% in the first four compulsory years of high school (from 12 to 16 years) to 83.8% for the last two non-compulsory years (16-18 years). The majority of the participants were Spanish (81%, n = 604). Most immigrant students (19%, n = 141) belonged to first generation immigrant families (85%), followed by mixed families comprising children and one parent born abroad (12.8%) and second generation immigrants (2.1%). All participants in this group were included in the category “immigrant”. The majority of the immigrant students came from Latin-America (82%), followed by students from other European countries (12%) and Africa (4.3%). Just 1.4% came from other countries like USA. The ages of participant students ranged from 12 to 18 years old (M = 14.5 in both participant groups, SD = 1.7 in the Spanish sample, SD = 1.4 in the immigrant sample). Regarding the parents’ education, 44.8% of the immigrant fathers and 40.5% of the mothers had primary school education, while 37.1% of the fathers and 36.2% of the mothers had attended high school; 18.1% of the fathers and 23.3% of the mothers had attended college. Regarding the Spanish sample, 39.2% of the fathers and 35.6% of the mothers had primary school education; 46.2% of the fathers and 46.4% of the mothers had attended high school; 14.5% of the fathers and 18% of the mothers had attended college.

**MEASUREMENT INSTRUMENTS**

In spite of reservations about self-reports,
they are sources of invaluable information about adolescents’ thoughts and impressions (Schneider, 2016). Thus, a self-reported anonymous questionnaire called EQUICO (López Larrosa & Dubra, 2010) was used. EQUICO’s relational subscales explore the community domain of school climate centered on students’ perceived relationships inside the school and perceived relationships between students’ families and schools. The Family-school relationship subscale is comprised of 10 items that evaluate frequency and quality. Students report how often their parents communicate with the regular class teacher, other teachers, the school counselor, the Headmaster and other school personnel using a five-point Likert scale ranging from 0 “no relationship” to 4 “a meaningful relationship”. They also rate the perceived quality of these relationships using a five-point Likert scale ranging from 0 “no relationship” to 4 “good” relationships. Quantity and quality measures are summed up. The reliability of this measure was \( \alpha = .88 \).

The School relationship subscale is comprised of 4 items rated in a five-point Likert scale ranging from 1 “not at all” to 5 “a lot” that measure adolescent’s perceived relationships with peers, teachers and their sense of belonging, for instance, “I fell that I belong to this school” “I connect with other students” or “I connect with teachers”. These questions aimed at measuring a sense of belonging. In the context of relationships, the verb “connect” (conectar) refers to feeling attached to someone. Also, “school belonging captures the extent to which students feel personally accepted, respected, included and supported by others in the school social environment” (Georgiades et al., 2013, p. 1477). The sense of belonging is a measure of social integration (Fuente & Herrero, 2012). The reliability of this measure was \( \alpha = .71 \).

As far as their academic performance was concerned, the students reported their marks from the second evaluation period. In the Spanish academic system, there are three evaluation periods. Marks range from 0 to 10. A mark of 5 means that the student passes the subject. All students know their academic results and participants reported on them. It was assumed that students did not lie when reporting on their marks. These data were collected along with EQUICO.

The instrument also asked for sociodemographic information: age, gender, parental education and place of birth of both parents and the participant adolescent.

Students were instructed to only answer the questions they felt comfortable with. Because of this, some data were not provided. Also, some participants ignored the highest educational level of both parents which also meant missing data.

**PROCEDURE**

Researchers contacted the school headmasters of the four participating schools. Once they agreed to participate, they obtained verbal consent from teachers and parents, as well as children’s assent.

The regular class teachers distributed the questionnaires in each class. Only students with parental consent and own assent in each class answered the questionnaires and did it simultaneously. Participant schools received a report with the main findings.

**RESULTS**

Each participant school had a different proportion of immigrant students ranging from 5.3% to 25.5% of the total student population. Thus, it was necessary to determine if there were any differences between the immigrant students in each school in the variables under analyses. ANOVAs showed no statistical differences between the immigrant students from the participating schools in relation to perceived Family-school relationships and School relationships (\( p > .10 \) in both variables). Neither were there differences in their marks (\( p > .10 \)). Immigrant students’ data from the four schools were analyzed together.

Prior to addressing our first research question, it was necessary to determine if the Spanish and the immigrant samples were equivalent in students’ age and gender and parental education. ANOVAs showed that there were no statistical differences between both samples, \( p = .90 \) for students’ age, \( p = .79 \) for fathers’ education and \( p = .96 \) for mothers’
education. Chi-square indicated that there were no differences in the gender distribution of both subsamples, \( p = .63 \).

In order to answer the first research question, ANOVAs were calculated to determine if there were statistical differences between Spanish and immigrant students’ in their perceived Family-school relationships and School relationships. Results showed that there were statistical differences between both groups in Family-school relationships, \( F_{(1,743)} = 11.21, p = .00 \). Cohen’s d, was 0.31 with a confidence interval ranging from 0.49 to 0.12, which is a small effect according to Cohen’s (1998) suggestions. Perceived Family-school relationships were higher (higher quantity and quality) for Spanish students than for immigrant students. But there were not significant differences between both samples in their perceived School relationships, \( p = .19 \).

As for the second research question, ANOVAs showed no statistically significant differences between Spanish and Immigrant students’ marks, \( p = .07 \). But it should be noted that immigrant students had lower marks (\( M = 5.3 \)) than Spanish students (\( M = 6.1 \)).

In order to answer the third research question, multidimensional scaling was run. Students’ mark was the dependent variable while the independent variables were age, gender, immigrant status, mother’s and fathers’ education, Family-school relationships, and School relationships. Results showed that the model was significant and accounted for 26% of the variance, \( F_{(13,288)} = 9.23, p < .001, R^2 = 0.29, R^2_{correct} = 0.26 \). The significant variables were: School relationships, \( p < .001 \), students’ age, \( p < .001 \), immigrant status, \( p < .001 \), and fathers’ and mothers’ educational level, \( p < .001 \) and \( p < .05 \), respectively.

As gender and Family-school relationships were out of the model, stepwise multiple regression analyses were calculated with the other variables in the Spanish sample and the immigrant sample separately.

In the Spanish sample, a model with four variables accounted for 27% of the variance: age, School relationships and parental education (see Table 1). The better the School relationships and the higher the mother’s and the father’s education, the better the academic results. The older the adolescents, the lower their academic results.

In the immigrant sample, a model with one variable accounted for 20% of the variance: School relationships (see Table 2). Again, the better the school relationships, the better the academic results.

| Stepwise multiple regression analyses, standardized coefficients \( \beta \) and standard error (SE) in the Spanish sample. |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| R               | R^2             | R^2_{correct}   | Change in R^2   | Change in F     | Significance    | \( \beta \) (SE) |
| Step 1 Age      | .35             | .12             | .12             | .12             | 38.11           | .000            | -.29** (.05)    |
| Step 2 SR       | .47             | .22             | .21             | .10             | 34.82           | .000            | .30** (.03)     |
| Step 3 ME       | .52             | .27             | .26             | .04             | 17.58           | .000            | .15* (014)      |
| Step 4 FE       | .53             | .28             | .27             | .01             | 5.08            | .025            | 13* (.15)       |

Note. SR (School relationships), ME (Mother education), FE (Father education).  
*\( p < .05 \) **\( p < .01 \)
DISCUSSION

This study contributes to our understanding of the role that the community domain of school climate (Wang & Degol, 2016) plays in students’ academic results. The students’ perceived family-school relationships and school relationships are measured and, in doing so, the perspectives of immigrant and Spanish adolescents considered. Results coincide with those in other studies that show that immigrant parents relate with schools less than Spanish parents, at least from the students’ perspective (Garreta Bochaca, 2008; Santos-Rego & Lorenzo-Moledo, 2009). However, the effect size of these differences is small and, this perceived relationship is not significant for the immigrant students’ performance. What is significant is what happens inside the school, that is, their relationships with peers and teachers, as previous studies have also highlighted (Juang et al., 2018; Lee et al., 2018; Mantovani & Martini, 2008). For the immigrant students in this study, school relationships impact more than any other variable, including parents’ education. Following Aldous (2006), immigrant parents with high aspirations and who place a crucial value in education can make a significant positive impact in how their children will perform at school, regardless of their sociocultural background. This could be an explanation of these results that needs further consideration in future research.

When people move to another country, significant relationships disappear or maintaining them becomes difficult, and new ones need to be developed. The development of immigrant adolescents’ relationships with peers and teachers may thus be related to enhancing their sense of belonging. Even assuming that people differ in the degree to which they feel that their needs of connection are satisfied, relationships inside the school seem to have an effect on academic success for immigrant students and for Spanish students. In this study, the more students felt their relationships inside the schools were good, the better their academic results.

As school relationships play a significant role in students’ academic results for both immigrant and Spanish students, the actions aimed at improving relationships between the school stakeholders (students and teachers) may be an effective path to also improving academic results (Juang et al., 2018). These actions could be added to the already existing plans to improve tolerance and coexistence (Xunta de Galicia, 2015) but they should take into account students’ perceptions and voices to really address those they intend to serve. This way, the fourth dimension of community school climate, that refers to cultural awareness, autonomy and respect (Wang & Degol, 2016), would also be under consideration.

In relation to students’ academic performance, results echo those of previous research (Santos-Rego et al., 2012). There are no significant differences between immigrant and Spanish students in the participant schools. This may relate to the fact that there were no differences between Spanish and immigrant students regarding school relationships (perceived School relationships is the most relevant of the variables in this study to explain immigrant adolescents’

![Table 2](image.png)

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<th>Step 1 SR</th>
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Note. SR (School relationships)
**p < .01
academic results). Also, it is possible that the plans already developed to integrate newcomers are working, although the fact that differences in academic performance were close to being significant, showing a lower performance for immigrant students, indicates that they could be improved as we have mentioned before.

What these results have also shown is that more variables operate at the same time when considering Spanish students’ academic results: their mothers and fathers’ education and their age are also important, together with school relationships. These results in the Spanish sample agree with previous studies that identified a decrease in academic motivation and performance at the onset of puberty (Martin & Steinbeck). But, in this study, the decrease continues through adolescence, which may also have to do with higher academic demands. Curiously, it does not happen with immigrant students that should also be subjected to similar academic demands.

Even when other studies have indicated that in this Spanish region parental SES affects student’s performance less than in other regions (Cabrera, 2016), in our study parent education is significantly related to Spanish students’ academic performance.

Gender was not significant in any of the participant samples, perhaps showing equality in boys and girls’ education and no underperformance of boys compared to girls as it has been found in other contexts.

This study addressed immigrant and Spanish students’ perceptions of school climate and how these impact on their schooling experiences and academic achievement. It has also raised questions that need further consideration. These non-addressed questions need to be acknowledged as a limitation. For example, are parents and children’s perceptions equivalent? If parents choose more private ways of involvement in their children’s education, are there any differences between immigrant and Spanish parents’ perceived involvement at home? Does family structure relate to differences in academic achievements (Corrás et al., 2017)? Is the cultural value or attitude towards formal education more relevant than the immigrant parents’ educational level? Future studies should also take into account the period of time the immigrant students have been living in the host country (Juang et al., 2018). In addition, more research is needed to deepen our knowledge about the impact that connectedness at school plays in immigrant students’ adjustment, what happens when they feel excluded and how this relates to aggression or victimization (Álvarez-García, Núñez, García, & Barreiro-Collazo, 2018). Quoting Bobowik, Basabe and Páez (2014) “youth and immigration are the human capital of increasingly ageing European societies” (p. 213). Studying their relationships is paramount.

Future research should deepen our knowledge of prominent and particular aspects of school relationships that have a greater impact on immigrant and Spanish students’ educational attainment, and on other social and psychological dimensions. A mixed methods approach, which takes into account students’, parents’ and teachers’ narratives would be a valuable contribution as a follow-up from this study.

**Conflict of interest**
The authors declare no conflict of interest.

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