

Profiles of family participation in Compulsory Secondary Education.

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Título: Perfiles de participación familiar en Educación Secundaria Obligatoria.

Resumen: Se analiza la participación de las familias en la educación de los hijos e hijas que cursan Educación Secundaria Obligatoria (ESO) mediante la aplicación de un cuestionario. La muestra inicial estuvo constituida por 5022 familias residentes en 16 comunidades autónomas de España, si bien la muestra real fue de 3982 progenitores, cuyos hijos e hijas cursaban ESO en 96 centros educativos. Tras identificar las características de estos padres y madres, considerando una serie de variables sociodemográficas y de participación familiar, se describen los perfiles de participación parentales mediante un análisis cluster bietápico que conforma tres modelos de participación familiar diferenciados: familias españolas con moderada participación y bajo sentimiento de pertenencia; familias de origen no español con baja participación y moderado sentimiento de pertenencia; y por último, familias españolas con alta participación y elevado sentimiento de pertenencia. El interés de la investigación radica fundamentalmente en dos realidades: en primer lugar, la elección de la ESO, por ser la etapa menos tratada en estudios de participación familiar dentro de la escolarización obligatoria en España. Y en segundo lugar porque se rompe con la existencia de una única bifurcación bipolar que se reduce a la existencia o no de participación. Hay múltiples variables que inciden en las formas de participar en el proceso educativo de los hijos y que conllevan la configuración de los perfiles obtenidos en este estudio.

Palabras clave: Perfiles de participación; Implicación; Familias; Educación Secundaria Obligatoria; Sentimiento de pertenencia.

Abstract: The participation of families in the education of children who attend Compulsory Secondary Education (ESO) through the application of a questionnaire is analyzed. The initial sample consisted of 5022 families residing in 16 autonomous communities of Spain, although the actual sample consisted of 3982 parents whose children attended ESO in 96 schools. After identifying the characteristics of these fathers and mothers, considering a series of sociodemographic variables and family participation, the parental participation profiles are described through a two-stage cluster analysis that makes up three different models of family participation: Spanish families with moderate participation and low sentiment of belonging; families of non-Spanish origin with low participation and moderate feeling of belonging; and finally, Spanish families with high participation and a high feeling of belonging. The interest of the research lies fundamentally in two realities: firstly, the choice of ESO, since it is the stage least treated in studies of family participation within compulsory schooling in Spain. And secondly because it breaks with the existence of a single bipolar bifurcation that is reduced to the existence or not of participation. There are multiple variables that affect the ways of participating in the educational process of the children and that involve the configuration of the profiles obtained in this study.

Keywords: Participation profiles; Implication; Families; Compulsory Secondary Education; Sense of belonging.

Introduction

Secondary Educational settings are described as spaces where disruptive behaviour, behaviour disorders and bullying are more acute, both in regards to frequency and seriousness, altering the possibilities of cohabiting and increasing school failure and school dropout (Lozano, 2003; Strohmeier & Noam, 2012; Valdés & Martínez, 2014). On occasions, the de-motivation and boredom, alongside instability and indistinct personalities associated with teenage identity crisis (Bolívar, 2004), boost the lack of feeling of belonging and disconnection from school life among members of the educational community, especially in families and pupils (Johnson, 2009; Mena, Fernández & Riviére, 2010), affecting negatively indexes of participation. Family participation in early years is justified by the child's age, in primary it is recommended; whereas in secondary this participation suffers a constant critique joined by apathy and a lack of proposals for improvement. This declining in family participation in secondary opposite to other key stages (Deslandes & Bertrand, 2005; Gomariz, Parra, García-Sanz, Hernández-Prados & Pérez-Cobacho, 2008; Rodríguez-Ruiz, Martínez-González & Ro-

drigo, 2016) entails important repercussions in the academic achievement (Epstein, 2011; Jaynes, 2011), sociopersonal development (Álvarez-Blanco & Martínez-González, 2016; Rodrigo, Martínez-González & Rodríguez-Ruiz, 2018) and in school cohabiting (Castro, Expósito, Lizasoain, López & Navaró, 2014; Chang-Hun & Juyoung Song, 2012). Hence the need for the spreading of studies regarding family participation in ESO which ought to be considered in the planning of programmes, as quoted by Hernández & Sancho (2004, p.55) "the name was changed - from baccalaureate school, to schools of secondary education-, but everything else was kept: the training and mentality of teaching staff, the spaces, the times", whereas the pupil intake and their families were different and demanded a higher accompaniment and educational attention to their needs.

On the other hand, the epistemic configuration of the subject variables (adolescence) and contextual variables (family, educational settings and community) requires to organise in dimensions the subjects of the study. From all the school factors that influence family participation, the type of setting is significant, regardless of the key stage, showing a higher influence in "concertados" settings (subsidised settings) (Gomariz et al., 2008; Ros, 2009). These settings are the most desirable option for both pupils and their families (Olmedo & Santa Cruz, 2008). The choice of setting takes place depending on the proximity of the setting, reputation, quality, results, recommendation, educational project and teaching and

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leadership staff, among other reasons (Pérez, 2014) and it is the key moment for family participation, as “those who fail to choose, must carry the responsibility of their errors” (Viñao, 2012, p. 84). In the face of this reality, state education must increase initiatives to involve families in school life as an indicator of educational quality.

In regards to family factors, differences have been found in family participation in relation to different sociodemographic variables. In terms of nationality, there is a desired communication which is not reached, in which non Spanish families show levels of participation lower than native families (Arniz, Giménez, & López, 2017; Garreta, 2009; Hernández-Prados, Gomariz, Parra & García-Sanz, 2016; Turney & Kao, 2009). With a lower level than the Spanish families, the immigrant families participate more in the formal processes such as meetings and tutorials, which affect directly the education of children; and they participate less in the cultural activities of the setting, such as School Council and AMPA (Association of pupil's parents) (Santos-Rego & Lorenzo, 2009). In such a way, the social representation of immigrant families in relation to levels of participation is far from the desirable-normative, being placed in deficit (García, Antolínez-Domínguez & Márquez-Lepe, 2015).

Closely linked to nationality one can find differences of participation “in relation to ethnic group, social origin and financial situation, with a lower implication from parents in the more disadvantaged groups” (Egido, 2014, p.50). Although participation and communication with the setting relies more in home implication, there are studies in which the use of a second language in the home and the financial position of the families were significative, known as the variable resulting from level of education, employment occupation and family income in relation to the number of people in the home (Murray, MacFarland-Piazza & Harrison, 2025; Santos-Rego, Ferraces, Godas & Lorenzo, 2018). However, it is not easy to obtain direct information from families about their income, therefore, following the latest PISA 2015 report (Ministry of Education, Culture and Sport, 2016), the index of socio-economic and cultural status (ISEC), as well as the educational level of families and employment occupation, it suggests as economical family situation, the resources available in the home, such as number of books; other learning resources such as study room, computer, internet connexion, etc.; and different material resources such as cars, mobile phones, big appliances, etc. Within the latter two resources mentioned, it can be appreciated the consideration to a great variety of technological goods, as mentioned by Eisminger et al. (2000), the indicators used to establish the socioeconomic level must be relevant to the time in which they are going to be used.

Sadly, families with low economic index are less involved in the education of their children, which determines negatively the way teachers communicate with these families and affects educational results of these students (Ankrum 2016). If low socioeconomic levels reduce family participation, in contrast, when referring to the variable level of education

reached by fathers and mothers, exploratory research studies assert that higher levels of participation are associated to a higher level of education (Fantuzzo, Tighe & Childs, 2000).

The concept of participation has been presented as unambiguous, when it is multidimensional and combines, according to Chen and Gregory (2010), behavioural and psychological aspects. Within the dimensions of participation, communication with teaching staff, especially with the tutor, is the most considered in research. It is perceived as necessary, regulated and highly valued by families, although it tends to be proposed by the tutor initiative and especially when there are performance or behaviour problems (García-Sanz, Gomariz, Hernández-Prados & Parra, 2010). In contrast, the implication in bodies of representation has been bureaucratized in such way that as Silveria (2016) highlights, family participation in School Council, has been found to be wrongly applied, little efficient and has resulted in inequality cases between teaching staff and family. In the AMPA, it is characterised by a lack of interest, a lack of knowledge about the setting and a distancing from the setting (Garreta, 2008).

On the other hand, home implication has usually higher levels of participation, a reflection of the good intentions, although not always willing is associated with knowing and being able to, therefore family training is important despite the scarce tradition in Spain. However, the effect of implication in school performance decreases when the help is reduced to school tasks (Wilder, 2014), as the educational responsibility of fathers and mothers embraces other aspects that influence the development of social strength and abilities.

Within the participation dimensions looked at, the feeling of belonging is the newest one, but also the most powerful, acting as cause and effect of participation. According to the study by Castro et al. (2014) the feeling of belonging to the setting, alongside the family educational climate and family expectations of performance, conditions the levels of participation to a larger extent than the socio-economic variables, nationality or level of studies. For some authors, this feeling integrates the satisfaction with the education the child receives, with the atmosphere of the setting, with the tutor and with the rest of families (Reparaz, Sanz & González, 2018). In the present study we link this feeling with the identification of the setting and the expectations.

In the face of the multifaceted problem of family participation in school settings, the aim of this study focuses in getting to know the family profiles of participation in the educational process of the pupils of ESO and how these profiles are specified. This general aim focuses in the following specific ones:

1. To identify the characteristics of participating families, considering the sociodemographic and family participation variables included in this research.
2. To find out the number of family participation profiles, as well as some descriptive statistics of these profiles, in relation to sociodemographic and participation variables considered.

3. To describe the characteristics of each of the profiles of family participation obtained, nominating them in relation to the characteristics and analysing the statistic significance of the variables that make up the profiles.
4. To study the statistic significance and magnitude of the effect between the family participation profiles obtained.

Method

Design

On the basis of the classification established by Ato, López & Benavente (2013), this study is integrated in the empirical research, in which an associative strategy is used. It is a predictive study which seeks the classification of groups through a “DPT: transversal predictive design” as referred to by the above authors (p. 1051)

Participants

Considering the population as families resident in Spain whose children were undertaking ESO in all the national territory, with the exception of Cataluña (due to self exclusion) a stratified random sample was carried out, starting from the autonomous community where they lived and the type of setting the direct descendents attended. Therefore, the selection criteria for the sample was: to be a parent of a pupil in ESO, to belong to any of the autonomous community except Cataluña, to include in proportion state, subsidised and private settings, and to accept voluntarily to participate.

Families that participated in the research belonged to 16 different autonomous communities and 96 different educational settings. The initial sample was of 5022 fathers and mothers, but there was a high sample decrease due to the exclusion of 1040 atypical families at the time of the statistic analysis. As the number of cases was still high, it was decided to eliminate the atypical ones, remaining a real sample made up of 3982 families. From these families, there was a consent to participate in the research individually of 11,2 % of fathers and 59,5% of mothers and together, 26,4%, which shows that mothers are generally the ones in charge of the school tasks of their children. The characteristics of the total of families is shown in the results of this contribution as a response to the first aim of the study.

Variables

Sociodemographic variables and family participation variables were considered in the present study. Sociodemographic variables with their correspondent options for answers are as follows:

- Title of the educational setting: state, private, subsidised.
- Family nationality: Spain, other country.
- Father's age: younger than 20, between 20 and 30, between 31 and 40 and between 41 and 50.

- Mother's age: younger than 20, between 20 and 30, between 31 and 40 and between 41 and 50.
- Father's education: primary education not completed, primary, secondary education, baccalaureate/vocational training (medium level), vocational training (higher level), bachelor's degree, university degree/or similar, doctorate.
- Mother's education: primary education not completed, primary, secondary education, baccalaureate/vocational training (medium level), vocational training (higher level), bachelor's degree, university degree/or similar, doctorate.
- Number of books: between 0 and 10 books, between 11 and 25 books, between 26 and 101 books, between 101 and 200 books, between 201 and 500 books, more than 500 books.
- Other learning resources (study room, study table, personal computer, educational software, internet connexion, school material, etc.): less than 3 resources, between 3 and 6 resources, from 7 to 10 resources, more than 10 resources.
- Financial resources (mobile phones - 1 point, big appliances - 1 point, computers - 2 points, televisions - 2 points, cars - 10 points): less than 10 points, from 10 to 20 points, from 21 to 30 points, more than 30 points.

The type of school setting and family nationality are categorical variables whereas the rest are numerical ones.

Family participation variables with their correspondent options for answers, are as follows:

- Setting-family communication (frequently - i.e “I go to tutorials when the tutor gives me an appointment” - and suitability of communication - i.e “I am satisfied with the meetings maintained with the setting”-): never, sometimes, frequently, always.
- Setting activities (family implication in activities organised by the school - i.e “I participate in training activities for families, such as parent school, information talks, etc” -) never, sometimes, frequently, always.
- Sense/feeling of belonging (extent to which families feel part of the educational community - i.e “I feel part of the school setting, I considered it as mine”-): nothing, a little, quite a lot, a lot (and academic expectations - what level of studies do you think your son/daughter will achieve?-): compulsory education, vocational training (medium level), baccalaureate/vocational training (higher level), university.
- Collaboration from home (accompaniment and educational support carried out by families from home - i.e “I encourage my child the responsible use of computers and mobile phones”-): never, sometimes, frequently, always.
- Implication in the AMPA (Pupil's parents association) (knowledge and participation of families in this association - i.e “I am or have been a member in the management committee of the AMPA in the setting”-): no, yes.
- Implication in the School Council [CE] (parental knowledge about the setting CE and its level of participation - i.e “I know the representatives of families from the School Council of the setting”-): no, yes.

All family participation variables are numeric, as the ones referred to implication in the AMPA and in the School Council of the setting, it was considered the sum of yes answers.

Instrument

The questionnaire employed for data collection was made up of 141 items (State School Council, 2014), from which 67 questions were used for this study; 21 of them provided information about sociodemographic variables which have been mentioned previously and 46 of them were regarding level of family participation of fathers and mothers in the education of their children.

In addition to the literature review, the validity of content of the instrument was carried out qualitatively through the interjudge procedure, specifically by 7 university teachers from 5 Spanish universities, research experts in the theme of family and/or educational research methodology.

On another note, the questionnaire globally considered, has a very good internal consistency ($\alpha = .865$). Within participation variables, reliability ranges between acceptable and high (De Vellis, 2003).

Procedure

The widest research from this study (State School Council, 2014), was carried out by a commission from the State School Council (Spain). In this research, researchers from five Spanish universities took part. Following some meetings with the management board of this body, the objectives of the research were established as well as the areas of work, in order to create the questionnaires for data collection (in the wider research, questionnaires were also given to teaching staff and heads of school settings). Such questionnaires were elaborated in constant coordination with the other research groups from the rest of universities.

The questionnaire applied in this study was given to parents as a hard copy (paper). This application was channeled through school councils from the different communities, who got in touch with the management teams of the settings, sending the questionnaires to them and asking them to fill them in and send them back to the headquarters of the corresponding regional school council. These headquarters, in turn, sent them to the State School Council for analysis.

Data Analysis

The data analysis has been carried out using the statistic programme SPSS, version 15 (as it is the one that provides the required graphics for the research). It was resorted to descriptor statistics (calculation of measures, typical deviations, frequencies and percentages) as well as the inferential one. Therefore, in order to obtain profiles of family participation from pupils in the Secondary Education key stages, a cluster

analysis was carried out in two phases, as it constituted “an automatic procedure of the optimal number of conglomerates and it allows the possibility to create conglomerate models with variables both categorical as continuous and the option to work with big size data files” (Rubio-Hurtado & Vilà-Baños, 2017, p. 118). In order to check the significant importance in the formation of the different clusters, the test Chi square was used for the categorical variables and the t of Student for numerical variables.

We are aware that in order to carry out a cluster analysis it is convenient to check the following conditions:

1. Independence between continuous variables, between categorical ones and between both.
2. Normal distribution of continuous variables.
3. Multinomial distribution of categorical variables.

After applying the correspondent tests (for the first condition: Spearman correlation coefficient, contingency coefficient and test of averages, respectively; for the second condition: Kolmogorov-Smirnov test; for the third condition: Chi square test), it was confirmed, the unfulfillment of such conditions, however, “the internal empirical checks, indicates that this procedure (cluster analysis) is quite strong even when these conditions don't fulfil” (Rubio-Hurtado & Vilà-Baños, 2017, p. 120).

For the calculation of significant differences between conglomerates, the Chi square test was applied for the categorical ones and the Kruskal-Wallis test for the numerical ones (as the means of normality and homoscedasticity did not fulfil). In all cases it was used a level of statistical meaning of $\alpha = .05$. The magnitude of the relation between profiles was obtained through the contingency coefficient in the categorical variables and, for the numerical variables, the size of the differences was calculated through d of Cohen (Cohen, 1988).

Results

Objective 1. To identify the characteristics of participant families, considering sociodemographic variables and family participation variables included in the research.

In Table 1 the frequency and percentages of the variables type of setting and family nationality are identified. As can be seen, participant families have enrolled their sons and daughters mostly in state settings, followed by subsidised and private settings. Furthermore, fathers and mothers are essentially of Spanish origin.

Table 2 shows the average and typical deviation of the numerical sociodemographic variables established in the research. It can be observed that fathers whose children were undertaking at the time of the research ESO, had an average age between 41 and 50 years old, whereas the mothers were slightly younger. The average of fathers education was in baccalaureate or vocational training of medium level, whereas the mothers reached a slightly higher level. Likewise, the sample of participant families in the study, had at home be-

tween 80 and 150 books on average, quite a few learning resources and sufficient financial means.

Table 1. Frequencies and percentages of categorical sociodemographic.

Type of School setting	State		Private		Subsidised	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	2548	63.99%	1272	31.94%	162	4.07%
Family Nationality	Spain		Other country			
	<i>n</i>	%	<i>n</i>	%		
	3417	85.81%	565	14.19%		

Table 2. Averages and typical deviations of numerical sociodemographic variables.

	<i>M</i>	<i>DT</i>
Father's age	4.09	4.09
Mother's age	3.88	3.88
Father's education	4.05	4.05
Mother's education	4.25	4.25
Number of books	3.72	3.72
Other learning resources	3.15	3.15
Financial resources	2.81	2.81

Table 3. Averages and typical deviations of family participation variables.

	<i>M</i>	<i>DT</i>
Family-setting communication	2.69	.389
Activities of the school setting	1.92	.695
Feeling of belonging	3.08	.581
Home collaboration	3.31	.360
Implication in the AMPA	1.92	1.987
Implication in the SC	2.45	2.101

In regards to family participation variables, in Table 3 averages and typical deviations are explained. It can be noticed that families perceived they communicated regularly with the educational setting, had low participation in activities organised by the setting, high feeling of belonging towards the setting where their children studied, relevant educational collaboration from the home, fairly low implication in the AMPA, as well as a scarce implication related to the CE (school council) of the setting.

Objective 2. To know the number of profiles in family participation, as well as some descriptive statistics of such profiles, in relation to sociodemographic variables and of participation.

As mentioned in the section regarding participants, from the 5022 families that answered the questionnaire, the cluster analysis carried out excluded 1040 cases. These are values that after the final conglomeration they could not be assigned to any of the clusters, therefore they were considered atypical values. Despite entailing a considerable high sample loss, it was decided not to include such cases in the analysis carried out, as the sample was still sufficiently big (Table 4).

Table 4. Distribution of family profiles in the ESO stage.

	<i>N</i>	Percentage of combined	Percentage of the total
Profile	1	2069	52%
	2	563	14.1%
	3	1350	33.9%
	Combined	3982	100%
Excluded	1040		20.7%
Total	5022		100%

In Table 4, it can be appreciated the configuration of the three family profiles. The first one, made up of more than half of fathers and mothers (52%); the second one, by just 14.1% of families; and the third profile, slightly more than the third part of the real sample (33.9%).

In Tables 5 and 6 are presented, respectively, frequencies and percentages of each of the categories of categorical sociodemographic variables: type of setting and nationality of families, for each of the participation profiles.

Table 5. Descriptors of the variable type of setting by family profile.

Categories	Descriptors	Profile		
		1	2	3
State	Frequency	2069	439	40
	Percentage	81.2%	17.2%	1.6%
Subsidised	Frequency	0	102	1170
	Percentage	0%	8.0%	92%
Private	Frequency	0	22	140
	Percentage	0%	13.6%	86.4%

Table 6. Descriptors of family nationality variable by family profiles.

Categories	Descriptors	Profiles		
		1	2	3
Spain	Frequency	2069	0	1348
	Percentage	60.6%	0%	39.4%
Other country	Frequency	0	563	2
	Percentage	0%	99.6%	.4%

Next, in Table 7 the average and typical deviation of the numerical sociodemographic variables considered in the research are indicated, in relation to the family participation profiles obtained.

Table 7. Descriptors of numerical sociodemographic variables by family profiles.

Variables	Descriptors	Profile		
		1	2	3
Father's age	<i>M</i>	4.10	3.96	4.15
	<i>SD</i>	.556	.655	.534
Mother's age	<i>M</i>	3.88	3.65	3.96
	<i>SD</i>	.524	.612	.503
Father's education	<i>M</i>	3.60	4.08	4.72
	<i>SD</i>	1.815	1.724	1.830
Mother's education	<i>M</i>	3.84	4.19	4.89
	<i>SD</i>	1.828	1.692	1.754
Number of books	<i>M</i>	3.65	3.13	4.08
	<i>SD</i>	1.228	1.419	1.180
Other learning resources	<i>M</i>	3.09	2.97	3.32
	<i>SD</i>	.657	.720	.632
Financial resources	<i>M</i>	2.80	2.62	2.91
	<i>SD</i>	.638	.654	.637

Finally, Table 8 shows, for each profile, the average and typical deviation of the family participation variables included in the study.

Table 8. Descriptors of participation variables by family profiles

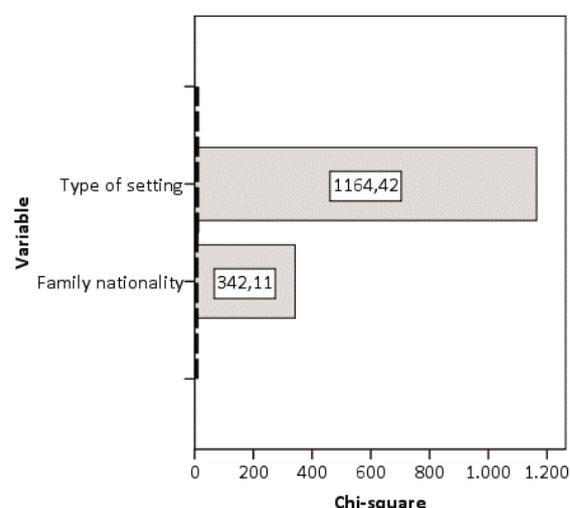
Variables	Descriptors	Profile		
		1	2	3
Family-setting communication	<i>M</i>	2.68	2.54	2.75
	<i>SD</i>	.367	.431	.388
Activities of the setting	<i>M</i>	1.77	1.74	2.22
	<i>SD</i>	.638	.644	.704
Feeling of belonging	<i>M</i>	2.99	3.05	3.24
	<i>SD</i>	.569	.608	.555
Home Collaboration	<i>M</i>	3.28	3.18	3.41
	<i>SD</i>	.343	.435	.324
Implication in AMPA	<i>M</i>	1.74	1.34	2.44
	<i>SD</i>	1.866	1.648	2.172
Implication in SC	<i>M</i>	2.50	1.59	2.74
	<i>SD</i>	2.009	1.736	2.277
Participation average		2.50	2.24	2.80

Objective 3. To describe the characteristics of each of the profiles of family participation obtained, naming them in relation to such characteristics and analysing the statistical meaning of the variables that make up such profiles.

Profile 1 makes the largest group of parents (Table 4), made up by slightly more than half of the participant families, all of them of Spanish nationality (Table 6), and with children that attend state school settings (Table 5). They are fathers and mothers with an intermediate age, but with education levels lower in both parents. These parents are in second place in relation to financial level of families and learning resources, included the number of books (Table 7). They show a level of participation intermediate, in relation to other profiles, what can be appreciated in the school setting communication, home collaboration, participation in activities organised by the setting, and the implication in both the AMPA and the CE (school council). However, families integrated in this first profile have the lowest feeling of belonging

towards the educational setting (Table 8).

In regards to statistical meaning of the categorical variables, in Figure 1, it can be appreciated that both the type of setting and nationality of parents are significant to configure the first profile of family participation (critical values of Chi-square of 7.38 and 5.02, respectively).

**Figure 1.** Importance of categorical variables in profile 1.

In regards to numerical variables, Figure 2 shows that, the father and mother's age, the number of books and material resources that the family have, has not reached statistical meaning. Equally, variables referred to family-setting communication and family implication in the CE (school council) have not obtained significant importance in the configuration of such profile (critical values of *t* of Student of -2.89 and 2.89). Irrespective of statistical meaning, with the exception of parental age and implication in the CE (school council), the rest of numerical variables are situated below the average.

As a result of the characteristics of this first profile, we have named it "Profile of Spanish families with moderate participation and low feeling of belonging".

Profile 2 has the smallest number of families, made up by only 14.1% of the sample (Table 4). It is made up of parents of non Spanish origin (Table 6), who have chosen for their sons and daughters state settings as well as private and subsidised (Table 5), in this percentage order. They are the youngest fathers and mothers from the three groups configured, with an intermediate level of education. They have lower financial and learning resources to the rest, included number of books (Table 7).

In relation to the level of participation it is the lowest of the three profiles. These families perceive the lowest family-setting communication, they have a lower implication from home, in the AMPA and in the CE (school council), also, they participate less in activities organised by the setting. However, in regards to feeling of belonging towards the setting they are in second place (Table 8).

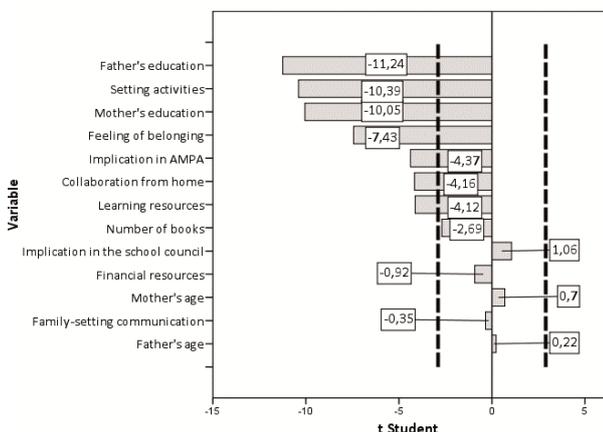


Figure 2. Importance of numerical variables in profile 1.

In relation to the importance of categorical variables, once again it is illustrated (Figure 3) that, both family nationality and type of setting the children attend, obtained statistical meaning to form this second family profile (critical values of Chi-square of 5.02 and 7.38, respectively).

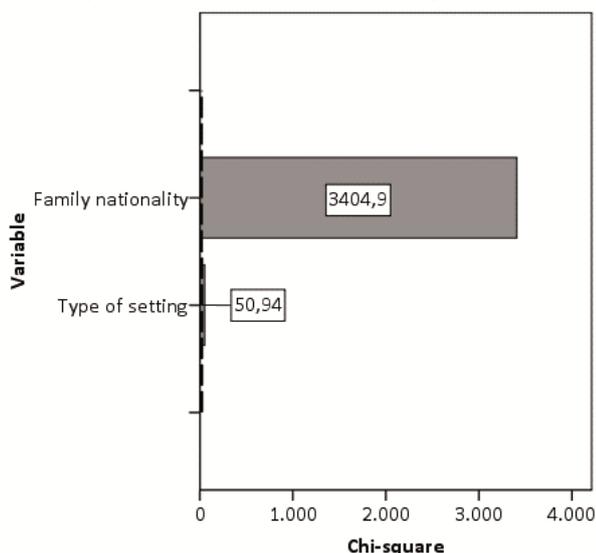


Figure 3. Importance of categorical variables in profile 2.

In regards to numerical variables, Figure 4 shows that all sociodemographic variables contemplated had significant importance to configure the second family profile, except father and mother's education. Furthermore, from participation variables, only feeling of belonging of families towards the educational setting of their sons and daughters had not reached statistical meaning in the makeup of the profile (critical values of t of Student of -2.9 and 2.9). With the exception of father's education, the rest of numerical variables had obtained values lower to the average (Figure 4).

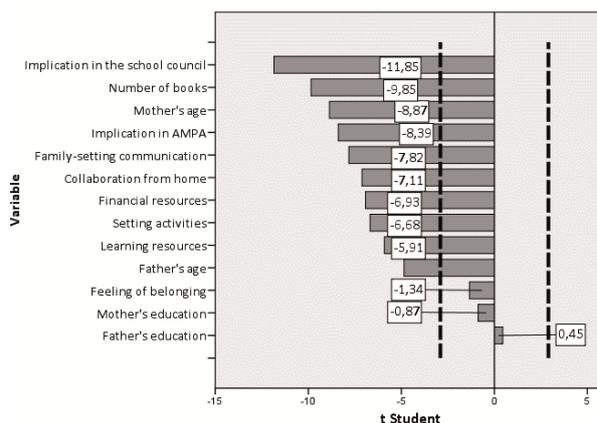


Figure 5. Importance of categorical variables in profile 3.

Taking into account the peculiarities of this second profile of fathers and mothers, it has been named “Profile of none Spanish origin families with low participation and moderate feeling of belonging”. The third family profile makes up the third part of participant parents (Table 4). These are families practically all of them from Spain (Table 6), whose sons and daughters study ESO mainly in private and subsidised settings (Table 5). They are the oldest parents and with a higher level of education, who have financial resources and learning resources superior to the rest of the families, including the number of books (Table 7).

They show the highest level of participation in the educational process of their sons and daughters, they perceive better communication with the educational setting, greater communication from the home, the highest level of participation in activities programmed by the setting, a high feeling of belonging and more implication both in the AMPA and the CE (school council) (Table 8).

In Figure 5 it can be observed, just like in the other two profiles, that the categorical variables of type of setting and nationality of families were statistically significant to make up this third family participation profile (critical values of Chi-square of 7.38 and 5.02, respectively).

In regards to the selected numerical variables, Figure 6 indicates that all of them (sociodemographic and participative) were significantly important to make up this third profile of family participation (critical values of t of Student of -2.9 and 2.9).

Furthermore, the totally of them reached scores superior to the average.

The qualities that characterised this third family profile are prominent in its name “Profile of Spanish families with high participation and high feeling of belonging”.

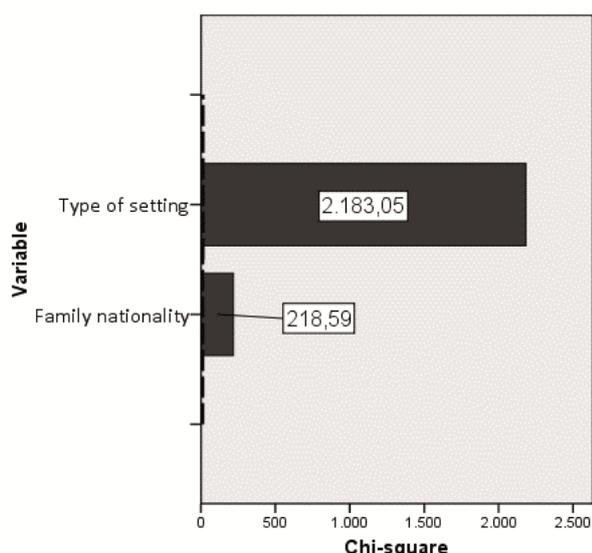


Figure 5. Importance of categorical variables in profile 3

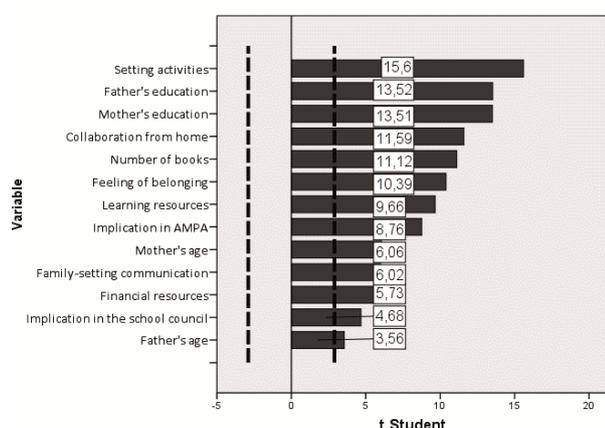


Figure 6. Importance of numerical variables in profile 3.

Objective 4. To study the statistical meaning and magnitude of the effect between family participation profiles obtained in the study.

In regards to both categorical variables considered for the configuration of conglomerates, in terms of type of setting, after applying the test Chi Square, it could be appreciated significant differences between the defined profiles ($p < .05$), as well as a value of contingency coefficient (effect size) superior to the typical one ($R_c \geq .30$) (Cohen, 1988). In regards to nationality of families, the same casuistry takes place, with the exception between family profiles 1 and 3 ($p = .080$; $R_c = .030$).

In terms of sociodemographic numerical variables, the test Kruskal-Wallis highlighted the existence of significant differences between all the conglomerate pairs configured ($p < .05$). However, d of Cohen only reached the typical value when contrasting the variables father's education and mother's education between profiles 1 and 3; as well as between profiles 2 and 3, when comparing the variables mother's age,

number of books, other learning resources and financial resources.

In regards to family participation variables, the test Kurskal-Wallis showed the presence of significant differences between profiles ($p < .05$), with the exception of the variable activities of the setting between profiles 1 and 2 ($p = .766$). In terms of magnitude of differences (effect size), d of Cohen indicated that typical value of ($d \geq .50$) was reached or surpassed in the following cases: between profiles 1 and 2, in the variable implication in the School Council; between profiles 1 and 3, in the variables activities of the setting and feeling of belonging; and between profiles 2 and 3, in the variables family-setting communication, activities of the setting, home collaboration, implication in AMPA and implication in the School Council.

Discussion and conclusions

Depending on the characteristics from participant fathers and mothers reflected in the research results, one could conclude that the profile consumer-clientele of families in relation to the settings where their children study ESO, is ratified (Egido, 2015). Family participation shows acceptable levels only in two of the six explored dimensions (feeling of belonging and collaboration from home), despite parents being every time more demanding and critical with the educational setting.

The conglomerate analysis carried out, identified three different profiles: a cluster with a moderate level of participation and low feeling of belonging (profile 1), a second cluster with low level of participation and moderate feeling of belonging (profile 2) and finally, a cluster with a high level of participation in all the dimensions including feeling of belonging (profile 3). This way, we break away from unilateral approaches family-school related that contemplate only one form of participation, as it is not dealt with (as a context with predictive capacity in the development of teenagers) from homogeneous universes (Garreta, 2013)

With respect to categorical variables, the type of setting shows a clear difference between the three profiles, not being the case for the nationality of families between profiles 1 and 3, as in both groups Spanish families are integrated. Likewise, in relation to participation variables, the significant differences between the clusters, are quite evident, being the magnitude of differences much more consistent between profiles 2 and 3. Finally, in terms of sociodemographic numerical variables, statistical meaning was found among all groups, with a higher effect size between conglomerate 2 and 3.

The profile of family participation 3, shows the important role that feeling of belonging to the school setting has in levels of participation, accordingly to previous research studies that reveal that such feeling, alongside the subjective-ideological interest and the utilitarianism-pragmatism constitute the motivational axis to participation (De la Guardia, 2002), connecting also this feeling of belonging with the

school performance and school atmosphere (Castro et al., 2014). From this, one can conclude that favouring this dimension would increase the probability of family participation, which requires further studies that would allow to explore aspects that determine feeling of belonging in order to develop action points.

However, the obtained results reveal a tendency of detachment from school settings, increasing every time, among families of Spanish nationality (profile 1), showing low levels of feeling of belonging to the school setting. Possibly this is caused by the intensification of the differences between both contexts: on one hand “a totally postmodern space, de-institutionalised and individualised (family) and on the other hand, a strong institution, totally modern and collective (school)” (Collet & Tort, 2008, p. 58).

It seems that confidence has been lost, and fathers and mothers can be interested in the education of their sons and daughters, but their roles and efforts could not be that evident (Galindo & Sheldon, 2012). Therefore, what pushes families to participate or not, is not the wellbeing or quality of the setting, but the particular interest in their son or daughter (De Torres, 2010).

If family participation is important for the education of family direct descendents, certain related aspects such as school achievement, attitude, motivational and emotional factors, in the case of immigrant families is paramount in order to improve inclusion and a higher presence of foreign pupils in the school system. However, results obtained prove that immigrant families have an intermediate feeling of belonging and low levels of participation (profile 2), ratifying that these aspects in immigrant families are inferior to those of local families (Arnaiz et al., 2017; Turney & Kao, 2009). In disadvantaged families participation is a key factor to achieve school success for students (Crozier, 2012), which requires to provide training, to generate mechanisms of participation and to promote general policies for families and specific ones for this group (Egido, 2014; Reparaz & Naval, 2014). This way, it allows a coming together and feeling of belonging of families to the setting, retrieving these families from anonymity and allowing a more personalised relationship.

In regards to levels of participation, the findings confirm

a lower presence of families in relation to educational matters of their children throughout the school system; the higher levels of participation are in infant education and the lower levels, nearly residual, in Secondary (Collet & Tort, 2008; Rodríguez-Ruiz et al., 2016). It is only profile 3, which represents a third of the sample, that has high participation indexes and results equiparable to 31.97% of families which make up conglomerate 1, defined by Parra, García-Sanz, Gomariz & Hernández-Prados (2014) as the profile with high implication from home, communication, participation in the setting and a high feeling of belonging.

It can be highlighted that there are still hurdles that make participation difficult, associated to sociodemographic variables, as families with less resources (profile 2), have less levels of participation (Van Velsor & Orozco, 2007), whereas those families with a higher level of education (profile 3), show a greater implication, exerting a more effective participation (Valdés, Martín & Sánchez, 2009). With regards to age, younger families participate less (profile 2) than older families (profile 3). In addition to these hurdles, schools and teaching staff need to tackle together other barriers such as those of emotional, physical and cultural kind, to increase participation of parents in all families and in particular in immigrant families (Galindo & Sheldon, 2012).

It is these statements and contents such as the value of feedback about feeling of belonging in families of educational settings or the awareness of diversity derived from the cultural background, what invites us to bear in mind an inclusive psychoeducational practice to acknowledge otherness.

In terms of methodology, as a prospective research, in future studies a factorial analysis will be carried out to obtain construct validity of the questionnaire, including calculations of composed reliability and the average extracted variance. Even though these type of studies present the limitations that entail any exploratory study, in the sense that it does not constitute improvement by its own, it does however help to systematize and to open perspectives for the development of collaborative, participative research, with a real social impact in the educational community, families, teaching staff and pupils, which in turn are agents for their own improvement processes.

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