

Single-sex schools in Spain: A qualitative analysis of the reasoning and perceptions of their principals

Escuelas diferenciadas en España: un análisis cualitativo de las razones y percepciones de sus directivos

Jaume CAMPS BANSELL, PhD. Senior Lecturer. Universitat Internacional de Catalunya (jaumecamps@uic.es).

Elisabeth VIERHELLER, PhD student. Faculty of Philosophy and Letters, Universidad Nacional de Cuyo (elivierheller@gmail.com).

Abstract:

Single sex education is still present in Spain's school panorama within a predominantly co-educational environment. Although there are some pieces of research from English-speaking countries on the reasons for promoting or maintaining this model of schooling, there are no studies from Spain. The proposed objective of this research is to examine in depth the reasons and motivations —pedagogical and otherwise— for creating or maintaining separation by sexes in single-sex schools in Spain, and —in the principals' perceptions— discover the good practices used in these schools and their outcomes. This work is based on qualitative analysis of twelve in-depth interviews with principals of these schools, which were recorded, transcribed, and processed using the Atlas.ti program. The analysis of the results enabled us to reach a variety of conclusions: separation is viewed as a practice that favours the objectives of individualised education; single-sex schooling, within an appropriate educational plan, delivers advantages

in areas such as gender equality or academic excellence; it makes it possible to meet a wish of the families; the inclusion of training plans for equality in these schools is a general practice. It is also apparent that the educational importance of teaching staff as gender role models to achieve greater equality of opportunities is valued.

Keywords: sex, gender, boys' schools, girls' schools, single sex education.

Resumen:

La educación diferenciada mantiene su presencia en el panorama escolar de España, en un entorno de coeducación generalizada. Aunque existen algunas investigaciones sobre las razones para mantener o promover este modelo escolar en los países anglosajones, no hay estudios para España. El objetivo propuesto es ahondar en las razones y motivaciones —pedagógicas u otras— de la creación o mantenimiento de la separación de los sexos en las escuelas diferenciadas en Es-

Revision accepted: 2017-03-05.

This is the English version of an article originally printed in Spanish in issue 269 of the *revista española de pedagogía*. For this reason, the abbreviation EV has been added to the page numbers. Please, cite this article as follows: Camps Bansell, J., & Vierheller, E. (2018). Escuelas diferenciadas en España: un análisis cualitativo de las razones y percepciones de sus directivos [*Single-sex schools in Spain: A qualitative analysis of the reasoning and perceptions of their principals*]. *Revista Española de Pedagogía*, 76 (269), 101-117. doi:

10.22550/REP76-1-2018-05

<https://revistadepedagogia.org/>

ISSN: 0034-9461 (Print), 2174-0909 (Online)

paña, y —en la percepción de los directivos— conocer los resultados y buenas prácticas que llevan a cabo en sus escuelas. Se ha partido del análisis cualitativo de doce entrevistas en profundidad con directivos de esas escuelas, que se grabaron, transcribieron y procesaron con el programa Atlas.ti. El análisis de los resultados permitió llegar a diversas conclusiones: la separación es percibida como práctica potenciadora de los objetivos de la educación personalizada; la escolarización diferenciada, dentro de una planificación educativa ade-

cuada, reporta ventajas para aspectos como la igualdad de género o la excelencia escolar; permite dar respuesta a una demanda de las familias; la inclusión de planes formativos para la igualdad en esas escuelas es una práctica generalizada. Se destaca también la consideración de la trascendencia educativa del profesorado como modelo de género para conseguir una mayor igualdad de oportunidades.

Descriptor: sexo, género, escuela masculina, escuela femenina, educación diferenciada

1. Introduction

The generalised co-education of boys and girls in Spain helped eliminate many social gender barriers, enabling men and women to start exploring professions and areas of life that for centuries had been allotted solely to the other sex. Nonetheless, after many years of single-sex and co-educational schooling, there are still various difficulties in the field of equality (Camps and Vidal, 2015; Duru-Bellat, 2010; UNESCO, 2012).

These difficulties have caused concern in recent decades, and have led to the appearance of new educational practices (Consell Superior d'Avaluació del Sistema Educatiu [Higher Council for Evaluating the Educational System], 2012), some of them within the now traditional co-educational schools, while others such as single-sex schooling or reflective co-education propose complete or partial separation of sexes. The progressive appearance of new single-sex or reflective co-education public schools, especially in the USA,

has inspired increased research interest in this field.

It is increasingly accepted that the learning environment is an important factor for students' motivation, results, and prospects (Hornstra, Mansfield, Van der Veen, Peetsma, and Volman, 2015).

In this study we aim to dig deeper into the development of single-sex schooling in Spain; more specifically, we will focus on the motivations and perceptions of people in management positions in these schools. While a body of research is starting to form that permits some quantitative comparison of educational outcomes between these gender-based educational practices (co-educational and single-sex schools), there is very little qualitative research in this field (Datnow and Hubbard, 2001; Mael et al., 2005). Perhaps because of the debate generated in recent years about how effective single-sex schooling is, there has been a tendency to focus on educational attainment based on the sex and the type of school variables, without

considering the reasons for choosing this organisational form.

2. The state of play

The two existing meta-analyses that compare results from co-educational and single-sex schools (Mael et al., 2005; Pahlke, Hyde and Allison, 2014) barely touch on what we intend to cover in this study. In addition, they examine a body of research that focusses on the English-speaking world and is not easily applicable to the case of Spain. In the USA, until very recently, this question had not been considered from the perspective of the motivations of the people who take decisions (Fabes, Pahlke, Borders, and Galligan, 2015), despite its growing popularity in that country's public schools.

Our aim is to reach a greater and better understanding of the reasons why the principals of single-sex schools maintain or choose this model. Clarifying these questions is of great interest, especially when the debate has entered the word of education policies (Martínez López-Muñoz et al., 2015).

Single-sex schooling is organised in spaces with just one sex, either the school as a whole or the classes. In southern European and Latin American countries, this type of school has mainly been established in 'individualised education' schools (García-Hoz, 1977, 1989). Individualised education can be defined as a vision and set of pedagogical practices that attempt to encourage the student to direct his or her own life, to develop the capability to make personal liberty effective, partici-

pating in the life of the community with his or her own personal traits; this means that at the school the student is the protagonist of the educational process. Furthermore, the person's uniqueness leads these schools to consider the contribution each student can make to the community, encouraging creativity. Teachers intervene in this process as helper or mediator (Carrasco, 2011).

The single-sex school, within individualised education, separates boys and girls from each other, arguing that this educational practice increases opportunities for each sex by neutralising gender pressures in the classroom and recognising that sex is the main category in the psychosocial configuration of a group of students (MacCoby, 2003; Páez, 2004). This separation has been described as something that increases the freedom of girls and boys, facilitates the exploration of new vital and academic territories for the student body, and prevents gender stereotypes and prejudices from holding back their interests (Camps et al., 2015; Duru-Bellat, 1995).

Single-sex schooling is very much present in English-speaking countries in public and private systems alike, based on a different –and more pragmatic– results-based perspective, and sometimes on a certain biological essentialism regarding gender differences; additionally, the improvement of women opportunities has been one of the boosters for female schools. (Park, Behrman and Choi, 2013).

The spread of co-educational schools occurred quickly in Western countries and for reasons that were not strictly

educational or related to equality (Fize, 2003; Riordan, 1990; Sadker and Sadker, 1995). A small but significant number of schools maintained separation of sexes for reasons that have not been studied. These schools, as they were small in number, found that they needed to prove their effectiveness (Riordan, 1990) through quantitative studies comparing them with co-educational schools.

The few existing qualitative studies of single-sex schools have primarily focussed on students' skill levels (Pahlke et al., 2014; Shmurak, 1998; Streitmatter, 1999; Svartoién-Conway, 2000) or the process of setting up these schools (Chadwell, 2010; Datnow, Hubbard and Woody, 2001; Datnow et al., 2002). There are also some qualitative approaches that start from the students' perceptions (Camps et al., 2015; Jackson, 2013).

Datnow et al. (2001) state that single sex education is currently valued as a strategy for improving classroom behaviour, eliminating distractions, and reducing peer pressure. This change in perspective was, at least partially, started by Gilligan (1993), who proposed girl-friendly schools that would be adapted to meet their needs. From this moment in particular, there was a series of single-sex proposals intended to empower girls, while at the same time the difficulties of boys were also starting to be recognised.

Research into principals' motivations for favouring single sex education is restricted to the English-speaking world. Datnow et al. (2001), in their study on schools in California, recognise that for most principals, reflective co-education

and single-sex education are a means for meeting the needs of students with difficulties, not an end in themselves. The view that these types of school help improve boys' attention and increase girls' self-esteem is widespread among educators, and they reproach the lack of time, means, and political backing for being able to implement them.

For most educators, the act of separating the sexes while maintaining the same educational quality is sufficient to ensure equality of opportunities; however, educators are not conscious of the gender biases in their work, nor do they receive help in avoiding them. It is also claimed that teaching staff often believe single-sex spaces facilitate frank and sincere relationships with students regarding their concerns and topics of interest, which encourages offering them advice (Datnow et al., 2001).

Pahlke et al (2014) recognise that people who promote and implement single-sex schools or classes usually value the greater learning possibilities for each sex, and their increased interest in the subjects. In this meta-analysis, they present some categories of assumptions about single-sex educational practices by the people who propose them.

Firstly, the assumptions of people who believe that these schools involve greater interest and academic development by girls and boys. These include three points of view:

- a) Assumptions focussing on bio-psychological learning differences (Gurian, 2010; James, 2007; Sax, 2005), which, for example, have an im-

pact on the prospects of separation for alleviating stereotypes and interesting girls in technology through specific teaching methods.

b) Assumptions that approach the topic from the psychosocial perspective, discerning negative effects of sexism in co-educational settings (Chaponière, 2010; Duru-Bellat, 2010).

c) Assumptions that, starting from biological and psychosocial assumptions, recognise that single-sex environments are more effective for minorities or students who are in disadvantaged situations as a result of their social environment (Hubbard and Datnow, 2005; Riordan, 2015).

Secondly, people who, independently of the effectiveness of separating the sexes, propose making it possible for families who favour this type of education to choose it (Chadwell, 2010; Liben, 2015; Martínez López-Muñiz, 2015).

Lingard et al. (2009) described some of the school principals' motivations for implementing single-sex classes: preventing boys' behavioural problems and academic difficulties from affecting other students; and facilitating settings where boys are motivated by subjects that social stereotypes depict as more appropriate for girls. These principals relate these difficulties to the lack of male role models among the teaching staff.

Fabes et al. (2015) state that there is a lack of studies that make it possible to understand decision makers' reasons for the increase in single-sex schools in the USA in recent years. The results of their research confirm that principals with ex-

perience in this type of school often have a more positive attitude towards it, see it as more effective, and –more often than the principals of co-educational schools– use essentialist arguments.

More specifically, and regarding public schools in the USA, Fabes (2015) found that principals primarily mentioned motivations relating to improving the student body's academic performance for making schools single-sex; a few principals also cited reasons regarding improved behaviour, linked to better academic development by students. He also described how numerous principals noted the influence of the schools' owners on whether they are separated by sex, followed by the teaching staff's or the families' interest in the setting. The many books, conferences, and workshops on single-sex schooling in the USA are also cited as factors that helped with taking the decision. Some positive aspects frequently cited by the principals once the school has been made single-sex are the improvement in satisfaction by teachers and families with the relationship between students and teachers, and in academic performance. A third of the principals commented that the change to single-sex schooling had also had a negative impact on some aspect, such as for example, boys' behaviour in class. Some noted organisational problems owing to the imbalance in numbers of the sexes in some academic years.

Finally, single-sex education has been described as a practice that is especially aligned with what is known as "individualised education", a type of school initially postulated by García Hoz. Sepa-

rating the sexes would, at the same time, entail adaptation to the female person's or male person's way of being (Ahedo, 2012), and a capacity for achieving the educational objectives that characterise the individualised school (Camps et al., 2015).

Some authors insist that the reasons in Spain for single-sex schooling are political, ideological, or religious, albeit without any studies to confirm this (Bonal, 1997; Subirats, 2010).

The framework we have so far set out can help classify the questions raised in this research. Nonetheless, it is hard to extrapolate the cited studies to what happens in the case of Spain, because of sociocultural differences and different educational paradigms.

3. Research questions

In Spain there are approximately two hundred single-sex schools (EASSE, 2016), all of them of privately owned. The debate –public and academic– and current lack of knowledge about this type of school have led us to focus our attention on it, excluding reflective co-education schools as there is such a small number of them and the difficulties of identifying them as such.

As well as questions of academic and educational effectiveness, this research aims to answer the following questions:

a) What are the reasons and motivations –pedagogical and otherwise– for the creation or maintenance of separation of sexes in single-sex schools in Spain.

b) What –in the opinion of the principals– are the results and good practices that single-sex schools implement, from a gender perspective and taking advantage of the separation of boys and girls.

4. Methodology

A qualitative methodology has been chosen for this study that enables us to observe reality through the participants' eyes and delve into the subjective opinions of educational actors. The literature review shows that we are pursuing objectives that have not previously been considered in the case of Spain, and so the reasons and motivations of the principals presented and analysed might differ notably with regards to what is reported in other pieces of research in this field carried out in different settings. The qualitative method thus involves an initial approach to an unexplored reality, and can act as a basis for future quantitative works that permit more reliable generalisation.

4.1. Participants

Twelve principals of single-sex schools in Spain were interviewed (eight men and four women). Their mean age was 48, ranging from 40 to 61. They had a mean experience of 13 years as principals in single-sex schools, with a range of 1 to 31 years' experience. Eight of the schools the participants ran were boys' schools and four were girls' schools, with a wide range in the age of the centres (from 3 to 53 years) and in the average sociocultural profile of the families.

Participant selection was carried out in two of the Spanish autonomous regions with the most single-sex schools (Madrid and Catalonia); the schools' or principals' email addresses were obtained from schools' websites or through telephone calls. Messages to request the interview were progressively and randomly sent by email, setting out the objectives and methodology of the study, and finally appointments were made with the principals who responded affirmatively. The interview request process stopped when theoretical saturation was reached. Of the seventeen principals who were asked if they would be willing to do an interview, twelve said yes. Before each interview, the objectives of the study were again provided in writing (email) and the interviewees were assured that their identity would be confidential; at the same time, they were informed of the need to make digital recordings of the interviews for subsequent transcription and analysis. The interviews took place between May and July 2016.

4.2. Interviews

An in-depth semi-structured interview was held with each participant. All of the interviews took place in the principals' respective schools and lasted between 60 and 80 minutes. The authors interviewed the participants directly.

At the start of each interview, the interviewers asked about contextual aspects that might be relevant for a better understanding of the rest of the conversation (the average socioeconomic level of the families at the school, whether the

interviewee had participated as a student or a professional in co-educational schools, etc.).

Wharton's scheme (2012) was used to establish a sequence for the topics on which to base the questions in the interviews. This author proposes approaching gender questions from three main levels, on which interpretations of different social situations are based:

- Individual, including conceptions about differences between the sexes and their origin.
- Interactional, approaching gender from the contexts in which individuals interact.
- Institutional, recognising that interactions often occur in organisations, which have a significant position in the roles, positions, and expectations that exist regarding individuals.

Starting from this preliminary scheme, the script for the points to cover in the interviews was developed based on the literature review, and divided into topics and subtopics.

To obtain the maximum amount of information, the established questions were complemented by other more specific ones when the answers were short or hard to understand («In what areas have you observed this?», «in which age groups is this especially apparent?» etc.).

The interviews were held in Catalan or Spanish depending on the mother tongue or preference of the participant and interviewer; all of the literal quotes are presented in English, having been translated where appropriate.

4.3. Analysis

The analysis was carried out using the Atlas.ti version 7.5.10 computer program. At a textual level, the twelve primary documents (transcripts of the interviews) have been divided into quotes compiled using previously established codes based on the predefined dimensions, and some other emerging ones that developed during the analysis. The corpus analysed contains 630 quotes and 33 codes.

5. Results

5.1. Educational programme

In all cases, the principals speak of their school as an institution with a mission to serve society and with Christian principles, although most of them state that their school does not have an official faith. There is also unanimity in presenting individualised education and the importance of relationships between the school and families as central aspects of the educational programme. Several interviews touch on personalised relationship with students and their families, socio-emotional education, integral education, the importance of the person, education in new technologies, the importance of languages, and education in values.

When talking about their school's ideals and educational programme, only three principals refer to single-sex education, presenting it at the end as a practice that is especially in line with the school project: «It is not our school's main feature» (Interview 1).

Despite the peripheral position of single-sex schooling in the educational programme, ten of the principals state that it is an organisational aspect that they would be reluctant to renounce: «It is one of the main features of our identity ... It is a question of demand from families» (Interview 1). Two of them, in recently-founded schools with some co-educational years as there are not enough students to implement a second pathway, recognise that separating sexes by class whenever possible is one of their objectives.

When asked about the convergence of single-sex schooling and the Christian way of thinking, ten of the twelve interviewees did not see any sort of relationship; the ones who gave more explanations specify that before the generalization of co-education most private schools had this way of thinking, and so to them it seems logical to maintain the correlation between these two aspects: «If there has ever been this moral conception, it is clear that it is currently in no way the basis of this school's practices (referring to single-sex schooling)» (Interview 2). Of the two who do see a certain possible relationship, one female principal said that the Christian concept of the distinction between man and woman might have an effect, although neither of them presents it as a primary motive.

All of them state that their schools' educational programmes include gender aspects: both single-sex education and aspects of equality. Seven principals explicitly referred to their school having a learning plan for gender equality, either specific or included in a general learning plan.

In three interviews the concept of the *artificiality* of school appears. Using this expression or similar ones, eleven of the twelve interviewees make some kind of reference to the fact that the school cannot and indeed should not reflect society: «The school's mission is not to reflect society. The school should change the people who will change the world» (Interview 2). Many of them argue that this artificiality is necessarily present in the school in aspects such as separation by age, etc., or because of the need to separate it from negative social aspects. Some of them add that it is precisely in this artificiality that some potentialities of the schools are found.

5.2. Social and academic development of the students

In the principals' views of socialisation, there is no negative perception of the cooperation and complementarity between the sexes that occur in mixed classrooms. Some of them regard this unisex schooling as something that was vital in eras when there was no social mixing.

All of them speak of the absence of insurmountable negative effects on socialisation in the separation of girls and boys at school, given that their out-of-school environments are mainly mixed: «My experience is that all of our girls live in the real world; they spend a few hours a day at school, but this is complemented by their family life, their relationships outside of school... School is not the whole of their lives» (Interview 9). Some of them recognise that separation impedes a bidirectional or comple-

mentary contribution at school, although they appreciate the advantages of separation and the efficacy of the strategies used to overcome this deficit. All of them, based on their experience, speak of the naturalness and normality of the vital relationships their students maintain with the opposite sex outside school or in their post-school life; several principals note that the families that trust them with their children would not do so if they perceived negative effects. Two male principals and one female principal explain that they have often asked older students or former students if they have difficulties relating to the other sex, and they all respond to this idea with laughter.

In their evaluation of separation of sexes at school, all of them consider certain potentials of this pedagogical model that might become educational strengths. Two aspects are repeated in various interviews.

Firstly, they speak of the importance of consolidating personal identity as vital for socialisation; and they present separation as advantageous for this: «As there are no boys, one advantage is that the girls grow up to have their own personality» (Interview 8).

Secondly, they note the psychosocial importance of separation in creating a climate of naturalness in actions, expressive possibilities free from gender pressures without embarrassment, etc.; one principal says that many students have told him that the fact there are no girls «means I can be myself more, and I can act naturally» (Interview 5); another

er principal states that «it lets them discover their sexuality in a more tranquil way... more calmly, with less trial and error... It also empowers the girls to discover themselves as girls, their identity, and not believe that they are women and so have to be liked and please others» (Interview 2). All of the principals who speak about this topic emphasise how single-sex schools make emotional-sexual education easier as students are more comfortable covering these topics in separate classes.

Three of the interviewees discuss how, from a certain age, the presence of the other sex is a distraction for the students, something that can lead to problems with learning or for friendships with others of the same sex.

Some explanations were given for actions carried out to encourage adequate socialisation with the other sex. Individual tutoring comes up in several interviews – a common practice in the twelve schools – as a space for dialogue where it can be discussed and where guidance and advice can be given.

When the principals were asked about how single-sex schooling contributes to eradicating violence towards women, they generally state that their schools help to solving this problem by decisively encouraging respect for others: «The fact that contact with girls is less frequent and not as constant ... means that when there is contact, they are more respectful» (Interview 1); «situations of violence by boys towards girls disappear» (Interview 11). Nonetheless, they do not all directly link this respect to the separation of sexes

in the school: «There are other variables that have nothing to do with mixed or single-sex education» (Interview 4).

5.3. Teacher training and specific practices

On the matter of their specific training in single-sex education, all but two of the interviewees state that they have read various books on this matter. They have all read articles and attended conferences focussing on this type of school. As for the training their teachers receive, they all say that some of the planned training sessions are about this question.

All of them state that there are no particular curriculum features that derive from them being single-sex schools. Practically all of them say that there are no specific teaching strategies for each sex. However, they also note that there might be conscious or unconscious differences because educational tasks in class are adapted to the students present who are all of one specific sex.

As for the profile of the teaching staff, in ten of the twelve schools, the sex of the teachers is always the same as that of the students at the obligatory levels. All of the interviewees recognise some impact of the sex of the teacher at the educational level, and they list various positive aspects of teachers and students being of the same sex: the chance of a boys' school ending up with entirely female teaching staff and the resulting lack of masculine role models is eliminated; greater trust is generated between the student body and the teaching staff.

5.4. Gender-based social and schooling challenges

Almost all gender-based social challenges the school can and should meet relate to equality in some way: equality of opportunities, eradicating sexism and gender-based violence, eliminating stereotypes, etc.

The answers given agree with stereotypes about separation in some ways, such as the above-mentioned existence in many of the centres of learning plans for equality. Furthermore, several interviewees identify the restrictive effect of stereotypes, and the advantage of separation for providing each sex with more freedom and opportunities: «Gender stereotypes are only negative when they restrict or limit the liberty of the individual... Stereotypes are the negatives imposed on men and women... I do not think single-sex schooling involves restricting possibilities to choose, in the academic or personal world» (Interview 2). Another principal notes that «there are boys here who take part in theatre, the choir, they volunteer in the community, they help the youngest children in the dining room... and if there were girls here, the boys would think that these are girls' things» (Interview 5). Some principals identify other activities aimed at combating stereotypes: «The fact we have single-sex teaching does not mean that we teach girls to iron and boys to wire plugs; we teach the same things to all of them, and so we teach the boys domestic tasks and the girls household maintenance» (Interview 6).

Among the explanations for how separation boosts opportunities for girls and boys, they emphasise how the absence

of the other sex means that any task is appropriate for the students, regardless of social stereotypes; it being a single-sex centre «means that (the girls) see science as just another subject... like physical education» (Interview 8). Several interviewees mention the possibilities of single-sex settings, given that in them, subjects are not viewed through the prism of gender but are experienced with greater naturalness: «The determinant of sex disappears in a way, leaving just the academic determinant; and this makes it possible for other things –such as the habitual role of sex– to disappear and so each child can develop in a more relaxed way» (Interview 11). On the other hand, the fact that the teaching staff are of the same sex establishes role models of the students' sex in all fields. Many interviewees mention their students' post-compulsory choices as not being shaped much by social stereotypes about what is appropriate for each sex (in comparison with mixed schooling): «It has been proven that access to engineering or science degrees increases if there are only girls» (Interview 10).

5.5. Advantages and disadvantages of the two models

When asked about co-education, all of the principals recognise that co-educational schools can educate effectively; one of them explains that «co-educational schools have been very positive in taking a first step towards equality for women» (Interview 8). Virtually all of them also recognise that both models have particular advantages and disadvantages, and that the presence of one or both sexes

creates differences in the classroom atmosphere that merit pedagogical attention.

Among the problems they perceive with co-education, the difficulty for teaching staff of recognising and handling the differences between girls and boys appears twice. Two other principals also mention difficulties with socialisation between the students in their emotional relationships that break up and reform with other students in the same classes. In particular, those who had never before worked in a co-educational school are very careful in their comments. In almost all cases, the explanations about the problems of co-education are brief, somewhat superficial, and different for each interviewee. Some principals claim that it is simpler to educate in classrooms with just one sex.

Among the difficulties of single-sex education, it is stated in various interviews that boys' classes feature an atmosphere of greater impulsiveness and certain indiscipline, while girls' classes more frequently present emotional conflicts and competition between the girls. They affirm – in many cases – that these distinctive features can be resolved with specific classroom management, and that they are not a problem.

They all value the advantages of single-sex education, and do not raise the possibility of turning their schools into co-educational centres except in one case (for organisational reasons of that specific school). Among the advantages, they frequently note the academic potential of separation for reducing failure in school and gender bias, thus creating a more academic environment with fewer distractions.

Furthermore, all of the interviewees see single-sex schooling as being beneficial for both sexes. Some of them note how it is easier to teach all-male or all-female classes: «My background is in co-educational schools. When I started teaching boys, I realised how easy it was, how this distribution made teaching and teaching practices easier» (Interview 2).

When asked specifically about the reasons why their school has single-sex education, three elements are repeated in almost all of the interviews:

– Experience has shown them that it is a pedagogical practice that works: «Our experience at primary and secondary level has been good; why would we change?» (Interview 12).

– This positive experience of single-sex classes relates to the individualised education pedagogical model; separating the sexes is another aspect that makes a very positive contribution to the objectives and the efficacy of this type of school: «There is one vitally important issue, namely that single-sex education favours the personalisation of education» (Interview 12).

– Single-sex schooling is offered because it is the preference of the parents who have chosen it: «If it did not appeal to parents, there would not be any single-sex schools» (Interview 6).

5.6. Valuation of single-sex schooling by other agents

In a few cases the principals appreciate that separation is the main reason why families choose their school. The fact that they studied in a single-sex school

and know how they work is another important reason to find one of these schools for their children. Other families, sometimes express concerns that disappear when they get to know the school. For all of the interviewees, educational outcomes and school environment are the main motivations for the families, although they do not relate them to single-sex education.

As for the teaching staff, the interviewees unanimously state that a large majority of their teachers very positively value single-sex schooling, and some of them mention that this valuation is shared by those who had previously worked in mixed schools.

In all of the aspects described, no significant differences are observed depending on whether the interviewee is a man or a woman, or if the school is a girls' school or a boys' one.

6. Conclusions and discussion

The first objective of this study was to examine the reasoning and motivations for the creation or maintenance of single-sex schools in Spain. It appears to confirm that there is a close relationship between single-sex education and the individualised education school model (Camps, 2015). The principals agree that, for single-sex schools, separation is a tool that fits in with the pedagogy of individualised education. For them this involves promoting the objectives of this pedagogy, especially with regards to reducing stereotypes and facilitating the liberty and opportunities of the student body, in a similar way to how Lingard et al. describe it (2009). In all of the interviews,

the principals state the importance of gender equality aspects and acknowledge the possibilities of co-education, but they appreciate the advantages of single-sex schooling, albeit while recognising some disadvantages in it. Other motives that frequently appear are improved academic results as well as creating a more academic environment (Riordan, 2009) and trust between the different agents in the school (Datnow et al., 2001). We did not find that the principals base their reasons for single-sex schooling on essentialist arguments about differences between the sexes, as seems to happen in other countries (Fabes et al., 2015), or on ideological, political, or religious reasons (Subirats, 2010), but instead on pedagogical and psychosocial reasons.

We were also able, on the one hand, to observe a pragmatic component in the explanations; confirmation of the good functioning of the school, which they partly attribute to the separation of the sexes means that they do not consider other organisational options (Riordan, 2008). On the other hand, the factor of parents' choice frequently appears as proof of the good outcomes, and as providing an option to parents who want it for their children.

As for the second objective (views on results and good practices in single-sex schooling), the unanimity among the principals interviewed is notable. On the one hand, academic results are valued, which they partly link to the separation of the sexes (Blakesley, 2013; Datnow et al., 2001), and they value the personal results in socialisation, eliminating stereotypes, and achieving greater equality of opportunities in post-obligatory choices

(Duru-Bellat, 1995; Riordan, 2009). On the other hand, all of the schools represented carry out specific education of the student body to boost education in equality between men and women, and in mutual respect. To achieve all of this, the interviewees mention the training they, as principals, have received, and which they promote among teaching staff. Among the principals in particular there are significant differences in levels of insight and training in single-sex educational practices and aspects relating to equality. They all agree that the curriculum is identical in girls' and boys' schools, albeit with didactic changes by teaching staff resulting from the expected adaptation to the students in their classes, one of the characteristics of which is the fact they are all of the same sex. The need for specific differentiated classroom management for boys to control and use their greater impulsiveness for their own benefit also comes up frequently (Blakesley, 2013); nonetheless, unlike what Lingard et al. describe (2009), they do not speak of separation as a solution to the behavioural problems of boys.

The ease of socialisation that single-sex classrooms provide – naturalness in relationships, greater expressive possibilities, etc. – that the interviewees describe, matches Blakesley's work (2013) which was carried out in Canada.

There is unanimity in recognising positive aspects in teacher-pupil gender coincidence. (Park et al., 2013).

Although with this study we cannot uncover the development over time of the perceptions of the principals, it is possible

to note a generalised positive attitude towards single-sex classrooms among them, just as Fabes et al. observe in the case of the USA (2015).

While Hubbard et al. (2005) and Riordan (2015) clearly describe the greater advantages of single-sex schooling for students who are at risk and in disadvantaged social situations, there is no unanimity between the interviewees about a particular student profile for which single-sex education is especially beneficial. This might be because each principal basically knows his or her own school, with its own specific student body profile, and so it could be difficult for them to make comparisons.

The principals interviewed recognise the differences between the sexes as an aspect to consider, albeit with little attention to neuroscience, but they often conclude their arguments with references to the possibility for families to choose educational styles, as Liben states in her study (2015).

It was not possible to establish significant differences according to the interviewee's sex, or whether the school is a boys' or girls' school (Pahlke, Bigler and Patterson, 2014).

According to the results obtained, it seems that the Spanish single-sex schools analysed correspond with heuristic models 3 and 5 presented by the Consell Superior d'Avaluació del Sistema Educatiu (2012).

This study main contribution is its exploration of the reasons given by the principals of Spanish single-sex schools

for creating or conserving schools with this organisational practice, a topic that until now has only been researched in English-speaking countries. A more in-depth consideration of this area of study from the perspectives of the teaching staff, the students, and of the families is suggested for future work, as these are areas that have received virtually no attention in Spain.

References

- Ahedo, J. (2012). Fundamento antropológico de la separación escolar de chicos y chicas. In E. Vierheller (Coord.), *Nuevo paradigma escolar* (pp. 39-60). Rosario: Logos.
- Blakesley, S. (2013). Single-sex Education in Northern Canada: A Case Study of Trapline Elementary School. *The Qualitative Report*, 18, 1-14.
- Bonal, X. (1997). *Las actitudes del profesorado ante la coeducación. Propuestas de intervención*. Barcelona: Graó.
- Camps, J. (2015). *Inteligencia de género para la escuela*. Pamplona: Círculo Rojo.
- Camps, J. and Vidal, E. (2015). Marte y Venus en el aula: las percepciones del alumnado sobre los efectos psicosociales de la escolarización mixta y diferenciada. **revista española de pedagogía**, 73 (260), 53-71.
- Carrasco, J. B. (2011). *Educación personalizada: principios, técnicas y recursos*. Madrid: Síntesis.
- Chadwell, D. (2010). *A gendered Choice*. Thousand Oaks, CA: Corwin.
- Chaponière, M. (2010). La mixité, une évidence trompeuse. *Revue Française de Pédagogie*, 171, 69-75.
- Consell Superior d'Avaluació del Sistema educatiu (2012). *Diferències en els resultats educatius de nois i noies a Catalunya*. Barcelona: CSDA.
- Datnow, A., Hubbard, L. and Woody, E. (2001). *Is Single Gender Schooling Viable in the Public Sector? Lessons from California's Pilot Program. Final Report*. Retrieved from <http://files.eric.ed.gov/fulltext/ED471051.pdf> (Consulted on May 12, 2016).
- Datnow, A. and Hubbard, L. (Eds.) (2002). *Gender in Policy and Practice. Perspectives on Single-Sex and Coeducational Schooling*. New York: Routledge-Falmer.
- Duru-Bellat, M. (1995). Filles et garçons à l'école, approches sociologiques et psycho-sociales. *Revue Française de Pédagogie*, 110 (1), 75-109.
- Duru-Bellat, M. (2010). La mixité à l'école et dans la vie, une thématique aux enjeux scientifiques forts et ouverts. *Revue Française de Pédagogie*, 171, 9-13.
- Fabes, R. A., Pahlke, E. Borders, A. Z. and Galligan, K. (2015). US principals' attitudes about and experiences with single-sex schooling. *Educational Studies*, 41 (3), 293-311.
- Fize, M. (2003). *Les pièges de la mixité scolaire*. Paris: Presses de la Renaissance.
- García Hoz, V. (1977). *La educación personalizada*. Valladolid: Miñón.
- García Hoz, V. (Dir.) (1989). *Tratado de educación personalizada. El concepto de persona*. Madrid: Rialp.
- Gilligan, C. (1993). *In a Different Voice: Psychological Theory and Women's Development*. Cambridge, Massachusetts: Harvard University Press.
- Gurian, M. (2010). *Boys and Girls Learn Differently!* San Francisco, CA: Jossey-Bass.
- Hornstra, L., Mansfield, C., Van der Veen, I., Peetsma, T. and Volman, M. (2015). Motivational teacher strategies: the role of beliefs and contextual factors, *Learning Environments Research*, 18 (3), 363-392. doi: 10.1007/s10984-015-9189-y
- Hubbard L. and Datnow, A. (2005). Do single-sex schools improve the education of low-income

- and minority students? An investigation of California's public single-gender academies. *Anthropology and Education Quarterly*, 36 (2), 115-131.
- Jackson, C. (2013). Can Single-sex Classes in Co-educational Schools Enhance the Learning Experiences of Girls and/or Boys? An Exploration of Pupils' Perceptions. *British Educational Research Journal*, 28 (1), 37-48.
- James, A. N. (2007). *Teaching the Male Brain*. Thousand Oaks, CA: Corwin Press.
- Liben, L. S. (2015). Probability Values and Human Values in Evaluating Single-Sex Education. *Sex Roles*, 72 (9), 401-426.
- Lingard, B., Martino, W. and Mills, M. (2009). Single-Sex Classes and Schools for Boys. In B. Lingard et al. (Coords.), *Boys and Schooling* (pp. 86-118). New York: Palgrave MacMillan.
- Maccoby, E. E. (2003). *The Two Sexes. Growing up Apart, Coming Together*. Cambridge: Harvard University Press.
- Mael, F. et al. (2005). *Single-Sex versus Coeducational Schooling: A Systematic Review*. Washington: Policy and Program Studies Service, U.S. Department of Education, Office of Planning, Evaluation and Policy Development.
- Martínez López-Muñiz, J. L. et al. (2015). *Legitimidad de los colegios de un solo sexo y su derecho a concierto en condiciones de igualdad*. Madrid: Iustel.
- Páez, D. (2004). *Psicología social, cultura y educación*. Madrid: Pearson.
- Pahlke, E., Bigler, R. S. and Patterson, M. M. (2014). Reasoning About Single-Sex Schooling for Girls Among Students, Parents, and Teachers. *Sex Roles*, 71 (5), 261-271.
- Pahlke, E., Hyde, J. S. and Allison, C. M. (2014). The Effects of Single-Sex Compared With Coeducational Schooling on Students' Performance and Attitudes, a Meta-Analysis. *Psychological Bulletin*, 140 (4), 1042-1072.
- Park, H., Berhman, J. R. and Choi, J. (2013). Causal Effects of Single-Sex Schools on College Entrance Exams and College Attendance: Random Assignment in Seoul High Schools. *Demography*, 50 (2), 447-469.
- Riordan, C. (1990). *Girls and boys in school. Together or separate?* New York: Teachers College Press.
- Riordan, C. (Dir.) (2008). *Early Implementation of Public Single-Sex Schools: Perceptions and Characteristics*. Washington, D.C.: US Department of Education.
- Riordan, C. (2009). The Effects of Single-Sex Schools. In *II Congreso Latinoamericano de Educación Diferenciada: Nuevos escenarios para la educación de mujeres y varones*, (pp.98-131). Buenos Aires: ALCED Argentina.
- Riordan, C. (2015). *Single-Sex Schools. A Place to Learn*. Lanham, MD: Rowman & Littlefield.
- Sadker, M. and Sadker, D. (1995). *Failing at Fairness*. New York: Touchstone.
- Sax, L. (2005). *Why Gender Matters*. New York: Doubleday.
- Shmurak, C. B. (1998). *Voices of Hope: Adolescent Girls at Single Sex and Coeducational Schools*. New York: Peter Lang.
- Streitmatter, J. L. (1999). *For girls only: Making a case for single-sex schooling*. Albany, NY: Sunny Press.
- Subirats, M. (2010). ¿Coeducación o escuela segregada? Un viejo y persistente debate. *Revista de la Asociación de Sociología de la Educación*, 3 (1), 143-158.
- Svartoién-Conway, J. I. (2000). *In search of connection: How graduates from all-girls high schools describe their leadership involvement at a coeducational university*. University of Nebraska - Lincoln, USA.
- UNESCO (2012). *Atlas mundial de la igualdad de género en la educación*. Paris: UNESCO.
- Wharton, A. S. (2012). *The Sociology of Gender*. Oxford: Wiley-Blackwell.

Authors' biographies

Jaume Camps is Senior Lecturer of Theories and Educational Institutions in the Department of Education at Universitat Internacional de Catalunya. His main lines of research focus on gender issues at school and in the development of Personalized Education.

Elisabeth Vierheller is Vice-president of the Latin American Association of Centers of Differentiated Education in Argentina. Online tutor and Teacher of Single-sex Education. PhD student at Universidad Nacional de Cuyo. Her main line of research is differentiated education or single-sex in complex social contexts.