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Literacy practices of primary education children in Andalusia (Spain): A family-based perspective

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Primary school children develop literacy practices in various domains and situations in everyday life. This study focused on the analysis of literacy practices of children aged 8–12 years from the perspective of their families. 1,843 families participated in the non-experimental explanatory study. The children in these families speak Spanish as a first language and are schooled in this language. The instrument used was a self-report questionnaire about children's home-literacy practices. The data obtained were analysed using categorical principal components analysis (CATPCA) and analysis of variance (ANOVA). The results show the complex relationship between literacy practices developed by children in the domains of home and school and the limited development of a literacy-promoting 'third space'. In conclusion, the families in our study had limited awareness of their role as literacy-promoting agents and thought of literacy learning as restricted to formal or academic spaces.

Keywords: primary education; socio-economic level; digital literacies; family literacy

Introduction

The study of literacy practices and the environments in which they are developed is vital to an understanding of how primary education children learn to read and write. The complex development of reading and writing in twenty-first-century society presents multiple types of literacy learning in different environments, both within and outside of school (Barton, 2001). The social value of reading and writing (Street, 1994) is broadly developed not only in the school domain, but also in other domains such as the home (Neuman & Celano, 2001). Consequently, children's various practices (institutional and vernacular practices) interact with each other through the spaces in which literacy is developed (e.g. homework or writing text messages on a mobile phone) (Barton & Lee, 2012).

An international comparative study, the Progress in International Reading Literacy Study (PIRLS), led by the International Association for the Evaluation of Education Achievement, compares the reading scores of children during their fourth year of school. The PIRLS reports produced in 2006, 2011 and 2016 (Mullis, Martin, Kennedy, & Foy, 2007; Mullis, Martin, Foy, & Drucker, 2012; Mullis, Martin, Foy,

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& Hooper, 2017) have shown Spain to have one of the lowest average scores in Europe. In fact, PIRLS 2016 showed that Spain is only ahead of Belgium and France among European countries. When data are compared with other European countries in international assessments, gaps in the field of literacy, in general, and reading comprehension, in particular, have been identified.

Similarly, the results obtained in PIRLS 2016 with an enlarged sample in different regions of Spain showed differences between these regions. The region of Andalusia (south of Spain) obtained worse results in 2016 than the regions of Madrid, Asturias, La Rioja and Castilla y León. The differences observed can be related to the socioeconomic status (SES) of the families in these regions of Spain. The data provided by the INE (Spanish National Institute for Statistics) show that the majority of the Spanish population at risk of poverty is concentrated in the south of the country. Nine out of the 10 municipalities of more than 50,000 inhabitants with the highest rate of population at risk of poverty are located in Andalusia (Llano Ortiz, 2016; Millán, 2016).

Theoretical framework

Literacy and the role of the family

The effect of school performance in relation to family and contextual factors has been the subject of numerous studies. Coddington et al. (2014) studied the extent to which family characteristics and parental educational level predicted school outcomes, and more recent research, such as that by de Zeeuw et al. (2015), Van Bergen et al. (2016) and Alston-Abel and Berninger (2017), has highlighted the relationship between the literacy activities developed in the home and the literacy learning of children in primary education. In particular, the relationship between the family environment and the development of reading has been studied from numerous perspectives. Sénéchal (2014) presents a review of the development of literacy in the 'children's home' space, and Martini and Sénéchal (2012) show how literacy learning promotes sources in the home and the attitudes of parents towards literacy. Subsequently, Anderson et al. (2017) and Saracho (2017) confirm the effects of a family literacy programme, highlighting the role of reading and writing activities in family literacy. These studies have compared the role of families in literacy to schools' literacy-promoting role, the diversity of literacy-promoting activities performed in the home domain (Dunsmore & Fisher, 2010) and the beneficial effect of reading experiences shared within the family (Sénéchal & Lefevre, 2014).

Nevertheless, the majority of these studies have not investigated the heterogeneity of 'invisible' or vernacular literacy-promoting practices in the home in a differentiated manner (Pahl & Allan, 2011), nor have they examined the social value (situated and everyday) that these practices acquire in the home environment. Camitta (1993) and Barton and Hamilton (1998) define vernacular practices as new forms of external literacy promotion that are different from the objectives of children's school practices and that have low social recognition. In contrast, dominant or institutional practices are described as those that are created and distributed by an institution such as a school and that have high social recognition.

The study of literacy in a local context exemplifies the literacy-promoting practices with which children interact in various domains, such as the home, school or peer communities (Pahl, 2002; Marsh, 2003). The family home, when viewed as a space rather than as a domain, as explained in the next section, becomes a meeting place where both academic and family literacy-promoting practices interact (Neuman & Celano, 2001).

Vernacular and institutional literacy-promoting practices

Children's literacy-promoting practices develop in the home and at school in relation to both domain and space. On the one hand, a domain can be defined as the place where one literacy-promoting practice was created and is used in a recurring manner (Barton & Hamilton, 1998); on the other hand, the location or place where the literacy-promoting practice has been performed is called a space. In this case, Pahl and Rowsell (2012) note that homework performed by primary pupils belongs to the school domain, despite being performed in the home space. In relation to the different domains and discourses developed by children, it is important to differentiate between those that originate from an educational institution or the school domain (dominant practices) and those that originate from the home domain (vernacular practices). This differentiation has led to the classification of literacy-promoting practices into models, represented in Figure 1. This figure, taken from Pahl and Rowsell (2012), combines the domains of literacy practices with the sites in which they occur. It represents the following four models of literacy: school literacy performed at school (reading and writing at school in pursuit of academic success); school literacy performed at home (reading and writing in the home in pursuit of academic success); literacy exclusive to the home (reading and writing in popular culture, computer games or text messages, etc.); and literacy that mixes models two and three (reading and writing at home, such as text messages or computer games, that are incorporated into the school domain and school literacy practices that are incorporated into other domains).

The use of information and communications technology (ICT) as a social practice has changed the access to and type of literacy, particularly in everyday vernacular discourses. Interaction with video games, the internet and mobile phones has

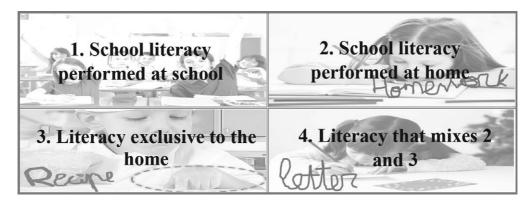


Figure 1. Literacy models in the family home and at school

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transformed the relationship between school literacy and complex literacy (Compton-Lilly & Green, 2011) in the home domain (Marsh, 2005). These vernacular literacy practices are self-generated, asystematic and involve non-formal or informal learning. They are fundamentally based on multimodal and hybrid discourses (Pahl, 2007), whose flexibility permits the creation of new discourses born from the interaction with other domains (Moje et al., 2004; Pahl & Kelly, 2005) and related to online communication (Barton & Lee, 2012). However, the use of ICT by children presents numerous inequalities and risks, as illustrated in reports by Marsh et al. (2005) and Wartella et al. (2014). Thus, reading and writing via ITC in the home domain differ not only based on sociocultural and educational levels, age, sex and race, but also on the type of technology used, the availability of parents and the amount of time spent using ICT (Connell et al., 2015).

The nature of vernacular practices and their dynamism to create new discursive genres (Barton & Lee, 2013) has changed schools' control over literacy (Davies & Merchant, 2009). New generations show evidence of a clear distancing between the traditional and dominant literacy practices of their parents and the vernacular and hybrid practices developed in peer communities or in the home (Barton & Lee, 2012). An analysis of literacy that considers the different domains demands that the study of learning to read and write be approached from a complex perspective of the social and situated nature of written communication.

Literacy domains: Between home and school

During the first few primary school years, the home domain plays a more relevant role than the school domain because the process of promoting a child's literacy is developed more in the family environment owing to the diversity of cultural sources with which a child interacts (e.g. television, computer games, popular music) (Gregory & Williams, 2000). Family literacy practices refer to oral and written discourses that occur in the home domain (Wasik & Van Horn, 2012). These discourses influence literacy learning among primary education pupils and explain some differences in their reading and writing practices outside of school (Compton-Lilly, 2003; Rogers, 2007).

The research by James (2008) shows how the digital divide becomes evident in the family context. This digital divide differentiates the literacy practices in the home. Marsh *et al.* (2017) have shown how literacy in the family context assumes a role of non-formal learning of children, especially in relation to digital literacy and in the construction and interpretation of multimodal discourses. This means that there are homes which have incorporated reading and writing 2.0 for socialising, collaborating and interacting with other subjects (Wohlwend, 2010), while other homes lack these practices (Redecker *et al.*, 2009; García-Martín & García-Sánchez, 2013). This latter situation does not always provide children with new literacy knowledge and abilities related to reading and writing in the virtual world (Wartella *et al.*, 2014).

The diversity of cultural sources in the home permits a greater influence from popular culture and informal learning in the development of children's literacy-promoting identity (Rowsell & Pahl, 2007), long before starting school and independent of the cultural level of the family context (Wells, 1986). Figure 1 represents the four

models of literacy promotion for children in primary education to approach literacy learning.

The strong existing interaction between the school and home domains and the importance of literacy-promoting practices that this interaction generates have made some researchers conceive of the creation of a 'third space' for literacy promotion. This space develops in a place that is separate from the children's school, where scholarly practices in the family space interact with personal/family practices of literacy promotion (Moje *et al.*, 2004). The theory of the 'third space' proposed by Bhabha (1994), Soja (1996) and Gutiérrez *et al.* (1999) presents a hypothesis concerning the creation of a new literacy space between the home and school domains. In this space, primary education children incorporate their experiences with popular culture, television and digital media, such as computers and tablets, into their literacy-promoting school experiences (Levy, 2008). The concept of a third space, as described by Soja (1996), has both a physical and a social dimension. In our study, this third space is composed of the intersection of school (first space) and home (second space), where each domain develops literacy promotion and, as a result, differentiated discourses (Gee, 2008).

The 'third space' allows the primary education student to interact with different discursive communities and thus to generate new discourses and understandings. This converts the configuration of the 'third space' into the catalyst of a profound epistemological and social change in literacy promotion, to the extent that it facilitates children's access to academic and everyday knowledge and discourses (Moje *et al.*, 2004). Therefore, 'third space' theory makes use of the literacy-promoting knowledge and experiences obtained by children outside of the school domain and combines them with the school's reading and writing strategies, with the aim of constructing a hybrid discourse (Cook, 2005). This hybrid discourse, which relates academic literacy to vernacular literacy, is characterised by interdiscursivity and the order of discourse (Chouliaraki & Fairclough, 2007). Our study describes primary education pupils' literacy-promoting practices from the perspective of families, using the home space as the focus of the analysis.

The practices developed in the home are part of the third space of literacy, in which digital and print elements are included and multimodal discourse occurs (Moje et al., 2004; Hill, 2010). The literacy experience of the young reader is complex in this third space, given the variety of texts and codes that he or she must interpret as part of a multimodal discourse, with written text (printed or digital) sharing prominence with visual text and audio text (Bearne, 2005). The development of this third space for literacy and the hybrid nature of the discourses developed within it play an important role as 'mediated context and tools for the future social and cognitive development' of children (Gutiérrez et al., 1999, p. 92).

The perspective of the third space that we adopt in this study follows the research of Bhabha (1994) and Soja (1996), in which the third space is considered to be a bridge between the two domains (communities and discourses) of home and school (Moje *et al.*, 2004). In addition, we consider the third space to be a social space, where different discourses and understandings that come from the school and home domains interact and transform. The third space becomes an area of understanding that allows both dialogue between the school curriculum and the knowledge that

children acquire in their everyday lives and children's access to the school's most complex literacy-promoting practices (Moje et al., 2004).

Literacy-promoting practices and the socio-economic status of schools

A large number of researchers have revealed the direct relationship between SES and its association with the literacy practices of children which develop in the home domain. Marcella et al. (2014) found that low income predicts certain family literacy practices, such as the reading of books, games with magnetic letters and narrating stories of daily life which involve parents and their children interacting with literacy. In addition, Coddington et al. (2014) have related children's literacy development to parents' level of study, and Puglisi et al. (2017) linked literacy to maternal linguistic skills. Both elements, the SES and educational level of parents, have been excellent predictors of childhood literacy (Grieshaber et al., 2011). SES measures both the educational and the occupational level of parents and the number of books and resources in the home, including adequate working space, a computer and internet connection, and support materials (Gil Flores, 2013). Regarding SES and children's literacy, Andalusia represents an area of low SES and poor literacy (Instituto Nacional de Evaluación Educativa, 2013). When we analysed the relationships between SES (divided into quartiles) and average scores in reading comprehension, we found that the Andalusian education system does not promote equity (that is to say, schools do not reduce children's socio-economic differences). The average score in reading comprehension of the children in the first quartile of SES (the most disadvantaged children) is the lowest in Spain, and below the average of the European Union and the OECD. All these elements highlight the need to better understand the various literacy practices in which pupils engage and the domains in which they take place.

The role of families in school performance, in general, and in literacy, in particular, has been broadly demonstrated in studies published since the 1970s (Bernstein, 1975; Bloom, 1978; Bourdieu & Passeron, 1990; Davies *et al.*, 2016; Alston-Abel & Berninger, 2017; Marsh *et al.*, 2017; Saracho, 2017). This article reports on literacy practices in primary education from the perspective of families, both in the school domain and in the domains of home, peer community and other discursive communities. Our study analyses the relationship in Andalusian families between the different types of literacy-promoting practices and SES, with the aim of determining what capacity they have to predict hybrid literacy practices and the development of the third space. Hybrid literacy practices refer to the interdiscursivity between reading and writing and media and digital literacy in the construction of literacy in children (Gregory & Williams, 2000; Chouliaraki & Fairclough, 2007; Kalman, 2008).

The research questions in our study were as follows:

- 1. What are the literacy practices of primary education children in the domains of school and home according to their families?
- 2. What are the characteristics of institutional and vernacular literacy practices among primary education children according to their families?
- 3. Do the institutional and vernacular literacy practices of primary education children differ based on the SES of schools?

Methodology

This research employed a survey method that used a self-report questionnaire to capture the literacy practices of children from the perspective of a broad sample of families. An explanatory or ex post facto, non-experimental design was used to determine the differences existing in the literacy practices of children based on the SES of their families. This type of design attempts to establish differences in one variable (literacy practices) without altering the conditions observed in the other (SES). The literacy practices variable was measured after identifying these practices' components using a categorical principal components analysis (CATPCA). The SES variable was measured using an index obtained after gathering SES information about the families. This research has followed the protocols of the ethical committee for research in social sciences of the University of Seville and families gave their informed consent to participate.

Sample

The sample comprised 1,438 families (parents or legal guardians), who represented 78% of the total families of the children in the second and third cycle of primary education (8–12 years of age) enrolled in 20 schools in Andalusia. Schools have different socio-economic characteristics and educational resources. The sample incorporates both public and private schools. Given the low number of non-Spanish residents in Andalusia (5%), the families were almost all native Spanish speakers.

To ensure the diversity of the sample and avoid bias, these schools were chosen using a quota sampling technique with the following criteria:

- (a) Proportional representation of levels of families' SES (high, middle-high, middle, middle-low, low) (see Table 1).
- (b) Proportional representation of schools (public and fee-paying private).
- (c) Proportionality of boys and girls at each school (50% each).
- (d) Proportional representation of different ages (8–12 years).
- (e) Proportionality of the number of children in each educational level (8–12 years).

The SES was obtained from the Andalusian administration and was based on indicators that consider information regarding parents' level of education, parents'

Explanatory segments of the values of SES Mid-high Medium High (-0.07/(-0.32/Mid-low (>0.36)-0.07) (-0.62/0.32)0.36) Low (<-0.62) S1 0.60 **S**3 0.14 **S**6 -0.12S9 -0.47S12 -0.70S16 -0.91S2 0.40 **S**4 0.02 **S**7 -0.26S10 -0.59S13 -0.66S17 -0.72S5 -0.01**S**8 S11 -0.60S14 -1.30S18 -0.82-0.10S19 -0.90S15 -1.02S20 -0.73

Table 1. Distribution of families as a function of SES

Source: Reports of General Diagnostic Tests 2011 (Autonomous Community of Andalusia, Ministry of Education).

Table 2. Description of the sample as a function of the contextual variables (in percentages)

		Socio-economic status (%)				
		High	Mid-high	Medium	Mid-low	Low
Educational level	No education	_	_	_	_	
	Primary education	17.00	31.90	28.70	38.60	48.50
	Secondary education	46.70	39.60	45.90	43.10	40.00
	University studies	36.30	28.50	25.40	18.30	11.40
Books in the home	None	0.50	_			1.30
	From 0 to 20	10.80	12.50	17.50	22.70	31.10
	From 21 to 40	20.40	18.30	19.70	23.70	27.20
	From 41 to 60	16.70	15.20	19.10	14.00	13.90
	More than 60	51.60	54.00	43.70	39.60	26.50
Computers in the home	None	3.20	8.00	7.10	15.90	18.00
	1	38.20	34.70	39.90	42.50	47.20
	2	34.40	39.30	33.30	30.00	23.90
	3	24.20	17.90	19.70	11.60	10.90
	More than 3	_	_	_	_	_

occupation, number of books and number of computers and tablets in the home. Based on these indicators, the schools in our sample with a high SES correspond to a greater percentage of families with higher education (36%), more than 60 books in their homes (52%) and a mean of two or three computers at home. Conversely, the schools with a low SES reflect the opposite values (48% have only primary education, 31% have fewer than 20 books in the home and 47% only have one computer) (Table 2).

Information collection procedure

The information collection procedure was based on the use of a self-report questionnaire called Literacy practices of primary education pupils from the perspective of their families (https://goo.gl/CiSyd5). The self-report questionnaire is organised in three dimensions that explore the literacy practices of children. The first dimension is based on the concept of space and shows the literacy events developed by children in digital and print media. The second dimension brings together the literacy events developed in public and school libraries. The third dimension asks about literacy events related to the production and cultural consumption of literacy by children in the family environment (Pahl & Rowsell, 2012). The version of the self-report questionnaire for the families was subject to a validation process using multi-dimensional scaling (PROXS-CAL) (Biencinto et al., 2013). To that end, we created a proximity matrix such that the transformed proximities would maintain the same order as the originals. The four values that measure imbalance in the data or stress statistics received scores close to zero, and the adjustment measurements approached one (Dispersion Accounted For (DAF) and Tucker's Congruence Coefficient (TCC), are shown in Table 3). The reliability, measured using Cronbach's alpha, of the total items is 0.89 and generates values above 0.70 in each of the two dimensions or components of the self-report. Values above 0.70 are considered acceptable and confirm the internal consistency of our self-report questionnaire (Tavakol & Dennick, 2011; Serbetar & Sedlar, 2016).

Dimension(s) of the self-administered	Cronbach's		Imb meast	Adjustment measurements			
questionnaire	alpha	Ngs	Stress I	Stress II	S-stress	DAF	ССТ
Vernacular literacy practices	0.764	0.072	0.268	0.689	0.163	0.928	0.963
Institutional literacy practices	0.735	0.065	0.254	0.651	0.143	0.935	0.967
Total	0.890						

Table 3. Psychometric indicators (reliability and validity) referring to the family self-report

Ngs, normalized gross stress; DAF, dispersion accounted for; TCC, Tucker's congruence coefficient.

Data analysis

The analysis of the responses was based on univariate statistics in order to describe the literacy practices of primary education children (Figures 2 and 3). We also carried out a CATPCA, which permitted a grouping of the items following a statistical logic that considers the correlation between the component and the item (Table 4). This kind of analysis allowed us to identify which practices (institutional or vernacular) best represented each component or profile. Finally, based on the factorial scores obtained in the CATPCA, an ANOVA was conducted to determine the existence of differences between the components as a function of the SES variable (Tables 5 and 6).

Results and discussion

Description of family practices in personal literacy promotion

Families' personal literacy-promotion practices are developed in a situated context (home domain) and with a communicative purpose. This perspective allows the identification of two levels that are associated with the development of different vernacular and institutional practices. On the first level, reading habits developed on a mobile phone predominate. Thus, the highest mean corresponds to families' reading WhatsApp ($\bar{x} = 3.87$), which, with an intermediate variation (CV of 43%), shows a high degree of agreement among the families. Among the texts that the families read, narrative texts stand out ($\bar{x} = 2.74$; CV = 69%), as do emails to a lesser extent ($\bar{x} = 2.49$; CV = 85%). On the second level, institutional practices are developed as a result of academic demand. The families confirmed the habit of acquiring books from book stores ($\bar{x} = 3.92$; CV = 39%) and shopping centres ($\bar{x} = 2.12$; CV = 86%), whereas purchasing books online was less prevalent ($\bar{x} = 0.36$; CV = 291.70%). The purchase of books in book stores and commercial centres was considered to be the most accessible cultural product ($\bar{x} = 2.69$; CV = 47%), more than other cultural goods such as video games, tickets to football matches and tickets to concerts ($\bar{x} = 4.44, 4.24$ and 4.05, respectively). These data allow an inference that purchasing does not depend on the families' SES but rather on the supposed social value of literacy-promoting



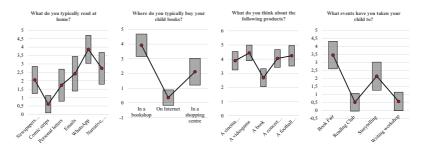


Figure 2. Family literacy (home domain, etc.) [Colour figure can be viewed at wileyonlinelibrary. com]

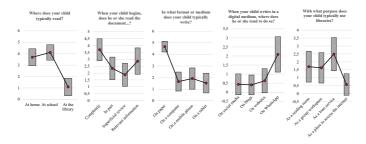


Figure 3. Children's literacy practices [Colour figure can be viewed at wileyonlinelibrary.com]

Table 4. Students' literacy profiles obtained using the CATPCA

	Component 1: Vernacular literacy practices	Factorial weights	Component 2: Institutional literacy practices	Factorial weights
Items	Reads in the library	0.503	Reads at home	0.558
	Writes on a computer	0.536	Reads at school	0.483
	Writes on a mobile phone	0.547	Reads texts completely	0.469
	Writes on a tablet	0.444	Writes on paper	0.529
	Writes on social media	0.376	Purchases books at book stores	0.494
	Writes on blogs	0.419	Purchases books at shopping centres	0.352
	Writes on websites	0.359	Price of a ticket to the cinema	0.585
	Writes emails, WhatsApp, etc.	0.501	Price of a video game	0.553
	Attends a book club	0.506	Price of a book	0.412
	Attends storytellers	0.304	Price of a ticket to a concert	0.537
	Attends writing workshops	0.465	Price of a ticket to a football match	0.514
	Uses the library as a reading room	0.522	Attends book fairs	0.419
	Uses the library for group work	0.503		
	Uses the library as a loan service	0.396		
	Uses the library as a place to access the internet	0.517		

Table 5.	Results of the comparisons of vernacular literacy practices as a function of the SES of
	families

Variables	%	N	Sig.	Difference in favour of centres with SES that is
Writes on a computer	12.9	186	0.026	High
Writes WhatsApp, etc.	12.7	100	0.020	111511
Uses the library for group work			0.000	
Goes to storytellers			0.000	
Prefers to read in the library	12.7	183	0.002	Medium
Uses the library as a loan service			0.000	
Uses the library to access the internet			0.000	
Goes to storytellers			0.000	
Writes on social media	41.7	599	0.043	Low
Writes WhatsApp, etc.			0.017	
Writes on blogs			0.016	
Writes on a mobile phone			0.001	
Uses the library principally as a reading room			0.001	
Uses the library as a loan service			0.000	
Uses the library to access the internet			0.000	
Writes on a tablet	_	_	_	_
Writes on websites	_	_	_	_
Attends a book club	_	_	_	_
Attends writing workshops		_	_	_

Table 6. Results of the comparisons of institutional literacy practices as a function of families' SES

Variables	%	N	Sig.	Difference in favour of families with SES that is
Reads at school	12.9	186	0.038	High
Attends book fairs			0.000	
Reads at home	18.3	263	0.029	Mid-high
Purchases at shopping centres			0.011	
Price of a ticket to the cinema			0.000	
Price of a video game	12.7	183	0.022	Medium
Price of a ticket to a football match			0.029	
Reads texts completely	_	_	_	_
Writes on paper	_	_	_	_
Purchases at book stores	_	_	_	_
Price of a book	_		_	_
Price of a ticket to a concert	_	_	_	_

cultural products. In contrast to these data, families do not tend to attend events related to reading and writing with their children, such as book clubs ($\bar{x} = 0.50$; CV = 222%), storytellers ($\bar{x} = 2.13$; CV = 83%) and writing workshops ($\bar{x} = 0.55$; CV = 210.90%), with the exception of book fairs ($\bar{x} = 3.45$; CV = 50%). The

descriptive analysis corroborates the scarcity of literacy-promoting practices developed by families in a community, since they are limited exclusively to the home domain (see Figure 2).

The results of our study indicate the relevance of families in relation to the complexity of children's literacy practices consistent with several previous studies (Auerbach, 1989; Hull & Schultz, 2002; Dunsmore & Fisher, 2010). Families have a clear awareness of the literacy practices of their children which have their origin in school and are not really aware of the role that they play in their children's literacy. Families do not view vernacular literacy promotion as a learning method, reinforcing the hegemonic character of school practices (Neuman & Celano, 2001). In this way, non-formal and informal learning are relegated to marginal practices which are not really valued by families. Similarly, families are not aware of their role as mediating agents in the process of literacy. The results obtained in our research show the perspective that families have on the literacy development of their children. The families' approach clearly differentiates the literacy practices that come from the school and those developed in other domains. Their vision of the literacy process is that of an education situated exclusively in the 'school' domain and located in the 'classroom' space (Pahl & Allan, 2011).

Description of children's literacy practices according to their families' approach

Children's literacy practices are principally developed in the school domain ($\bar{x} = 4.11$; CV = 33%). However, the mean score of *reading in libraries* ($\bar{x} = 1.90$) shows a broad variability (CV = 140.37%), which indicates strong disagreement with the use of libraries as literacy-promoting domains in a community.

Analysing the purposes of reading in the family context, the univariate statistics show the predominance of reading a complete text ($\bar{x}=3.70$; CV = 43%), instead of reading directed at the search for specific information ($\bar{x}=1.88$; CV = 89%) and handwriting ($\bar{x}=4.67$; CV = 20%). From this perspective, families consider that children's use of writing in digital media, such as emails and WhatsApp messages ($\bar{x}=2.09$; CV = 94%), is not important in this context. The analysis used in the study of children's literacy practices describes a family approach to literacy that is close to the development of institutional practices (see Figure 3).

Families do not value the literacy of reading and writing of their children which develops through the use of ICT and beyond the school domain (Lankshear & Knobel, 1997; Williams, 2009). The results of our study corroborate previous findings that the reading and writing practices of the families themselves are similar to those of their children, where everyday literacy practices have a low social value (Camitta, 1993).

Children's literacy profiles from the perspective of their families

The complexity of literacy practices required a CATPCA with the aim of reducing their variability. The results obtained allow us to identify different literacy profiles among the children. This analysis differentiates two components: vernacular literacy practices (Component 1) and institutional literacy practices (Component 2)

(Table 4). Component 1, the *vernacular literacy practices* profile, describes children's literacy practices in written communication using digital media. It refers to writing a *status* on Facebook, a *post* on a blog, an email or a WhatsApp message, in which a non-formal or informal learning process has mediated (e.g. peer communities). Component 2 describes a reading profile that is related to formal (school) learning, *institutional literacy practices*, which cover reading practices developed at home or at school from homework. Thus, the results obtained show the relevance for families of handwriting, purchasing books at book stores, the use of scholarly libraries and attending book fairs.

Figure 1 shows the disposition of the factorial weights of the two components obtained in the CATPCA. The items from Component 1 are situated on the horizontal axis, whose variability is better explained by vernacular literacy practices. The variability of the items from Component 2 is represented on the vertical axis (institutional literacy practices). Because these are two orthogonal components, opposite positions in the space of the plane are visible: handwriting vs. writing a blog; reading at home and reading at school vs. writing on social media or writing on WhatsApp, and so on (Figure 4).

Our research demonstrates that children's literacy practices in the home and school domains are quite different. In particular, writing habits are related to vernacular practices while reading habits relate to institutional ones. The results show that reading, associated with school activity and with an instrumental or epistemic level of language, was viewed by families as having higher social prestige than vernacular

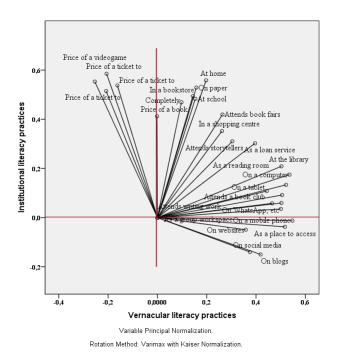


Figure 4. Graphic representation of the factorial weights obtained using the CATPCAs [Colour figure can be viewed at wileyonlinelibrary.com]

practices of a functional nature (Arthur, 2005; Yamada-Rice, 2010). On the other hand, the social value given to writing is related to everyday vernacular practices of a functional nature (Freebody & Luke, 1990).

Analysis of children's learned practices based on the SES variable

The ANOVA allowed us to establish differences according to SES. The analysis identified significant differences in the items that characterise the description of the two forms of literacy practices (vernacular and institutional). These two forms show differences of a progressive character as a function of the high, mid-high, medium, midlow and low SES levels of the schools.

Vernacular literacy practices are different in schools that have a high, medium or low SES. Children who attend a school with a high SES emphasise the use of computers in writing homework, whereas children in schools with a low SES tend to use writing in a more functional way (for instance, writing on social media and blogging). In addition, the analysis corroborates the generalised use of writing on mobile phones (WhatsApp) by primary education pupils; the significance value did not allow differences between high and low SES values to be established.

The ANOVA (Table 6) applied to *institutional literacy practices* indicates the existence of statistically significant differences in relation to the SES levels (high, midhigh, mid-low and low). Families with a high SES present literacy practices that are related to the school domain, and families with a midhigh SES show a greater development of literacy practices in the home domain. Both SES values (high and midhigh) connect the development of literacy to attendance at events that are related to reading and writing, in contrast to lower SES values.

However, families associated with schools designated as low SES support the development of literacy practices performed in the library domain. This contrasts with the use of libraries by pupils with other family SES values. In particular, pupils with a mid-low family SES tend to use the library as a loan service and a place to access the internet, given that the children attending this type of school do not have access to the internet at home and the number of books available at home is lower than that of children from other schools. In contrast, pupils with a high family SES use libraries as a place for group work.

Children's vernacular and school literacy practices are different according to the SES of their schools. The ANOVA shows the predictive character of the SES associated with the predominance of one type of literacy practice. In particular, families whose children go to schools with a high SES show greater development in terms of school literacy practices, whereas families from schools with a low SES associate more with vernacular literacy practices (Wohlwend, 2010).

The contrasts between home and school literacy practices according to children's families show that there are different purposes and strategies for reading and writing from a social and situated perspective (Marsh, 2003). The need to take into account school and vernacular discourses would require a change in social preconceptions, particularly in the home environment, in which formal school literacy is privileged above other aspects of non-formal or informal literacy.

Implications and conclusion

Taking the perspective of Andalusian families on the literacy of their children has made it possible to differentiate clearly the practices at home and at school. However, these practices are judged to have different value depending on whether they originate inside or outside of school. In general, school practices are afforded greater social recognition and literacy work falls almost exclusively within the school domain. The hegemonic role of school practices is accentuated in families with a high SES. In contrast, literacy practices in families with a low SES are more permeable to digital writing and reading, although this does not change their valuing the role of the school as a single agent of literacy. Andalusian families are not aware of their mediating role in the literacy of their children in different environments. As a consequence, families often do not pay attention to various home literacy practices, such as bedtime stories or attending reading events in book stores or libraries.

The configuration of this third space in Andalusian schools would require incorporating greater flexibility in the primary education curriculum in order to adapt it to the different contexts of family literacy. The result of this third space would be a shared curriculum for families and teachers. This would imply the entrance into the school of popular culture and vernacular practices that take place in the home, in the neighbourhood or in other communities of their environment (Rowsell & Pahl, 2007). The practices developed by families in the home could be used in the classroom to foster the construction of new values about literacy in everyday contexts for children. An example could be a 'treasure box', made up of everyday objects that parents and children use for play at home. Popular stories, storytelling, song lyrics or video recordings accompanied by their props are another way of introducing contents created in vernacular domains into the school (Pahl & Kelly, 2005). Also, artistic productions made by parents and children at home could be an excellent way for children to read and write using words and expressions that are meaningful to them (Pahl, Rasool & Campbell, 2018).

The differences in the literacy practices of the families described in this research have shown how they conceive literacy in the twenty-first century in a restrictive way. The creation of a third literacy space would help to bring both types of literacy practices closer, favouring a change in the value of institutional literacy in the school from a more complex multi-literacy (Walsh, 2017). It would allow many children to approach school literacy practices with new expectations. This space could facilitate a change in discourse and understanding, which could, in turn, bridge the gap between different domains of learning (Moje *et al.*, 2004).

In conclusion, the novel contributions of this article have highlighted the isolation of the school domain in Andalusia in relation to the communicative practices that children develop in their daily lives (e.g. through ICT). On the other hand, families have a formal vision of literacy learning and are unaware of their role as mediating agents in the process of literacy. Families' perspectives on children's literacy differ from one SES to another. Our study has shown that the literacy practices of children with high SES are closer to institutional practices and those with low SES closer to vernacular practices. All this has shaped a novel research approach to primary education in Spain. This has allowed us to complement other studies (e.g. PIRLS) focusing

on the skills developed by children in formal school learning. This research has highlighted the relevance of families' perspectives on literacy and has raised new research challenges from a broader and more heterogeneous perspective of children's literacy in the Spanish educational context.

Limitations

Our research has a number of limitations, including the research method applied. One limitation of our research is the use of a self-report questionnaire for the survey. Although the survey allowed us to collect data from a large sample, the use of regression analysis to explore the data cannot establish cause and effect.

Another limitation relates to the idea of a third space. Although we propose that the creation of a third space would be beneficial to primary education children, we cannot be certain what form it would take or its effect. Therefore, qualitative research (following the New Literacy Studies approach), or the use of experimental designs, could help us to explore the possibilities that arise from the creation of a third space and the modification of the school curriculum to incorporate literacy elements of the home domain.

The results obtained in this investigation have raised new questions about how different discursive communities in which primary education children participate interact. Therefore, in a second study phase, it would be necessary to deepen the investigation into hybrid literacy practices using a qualitative methodology. This extension of the research should look into the construction of the identity and social values of literacy in Spanish children according to their different families' SES.

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