

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/312244151>

The Parental Investment Effect on Immigrant Children at Schools: Employment and Specialization of Parents

Article · January 2016

DOI: 10.14355/ijap.2016.05.004

CITATIONS

0

READS

7

3 authors, including:



Margarida Alves Martins

ISPA Instituto Universitário

72 PUBLICATIONS 402 CITATIONS

[SEE PROFILE](#)



Carlos Silva

University of Aveiro

204 PUBLICATIONS 346 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Capacidade e Qualidade de Vida no Trabalho dos Professores de Enfermagem em Portugal [View project](#)



The impact of invented spelling programmes on literacy acquisition [View project](#)

The Parental Investment Effect on Immigrant Children at Schools: Employment and Specialization of Parents as an Explaining Variable for Tasks Achievement in Second Language

Socioeconomic Disadvantages for Academic Enrollment of Immigrant Young Students

Sandra Figueiredo^{*1}, Margarida Alves Martins², Carlos Fernandes da Silva³

¹Post-doctoral Researcher and Assistant Professor of Psychology, Universidade Autónoma de Lisboa, Lisbon, Portugal

²Full Professor of ISPA – Instituto Universitário, Lisbon, Portugal

³Full Professor of Department of Education of University of Aveiro, Portugal

^{*}sandradfigueiredo@ua.pt; ²mmartins@ispa.pt; ³csilva@ua.pt

Abstract

The present research study examines how family environment has an impact on immigrant children's task performance considering the Socioeconomic Status (SES) of parents, but focusing two dimensions of the immigrant SES specificities (APA, 2012): the professional situation and related educational background (employment and specialization professions/work of parents). Economically disadvantaged families (parents unemployed or whose job is unspecialized) may be a predictor of different performances in a second language (L2), involving deficits for parental investment and for specific cognitive skills in childhood and adolescence. 108 learners of Portuguese as a L2, aged 8 to 17, from lower to middle socioeconomic backgrounds, completed four language and verbal reasoning tasks in European Portuguese: verbal analogies, semantic associations, picture identification and morphological extraction. A series of MANOVAs indicated that learners from lower socioeconomic backgrounds perform worse in the four administered tasks due to their parents' unemployment situation but students whose parents had unspecialized jobs performed better than those whose parents had specialized jobs. Unskilled jobs were confirmed as related to higher immigrant parental investment. Educational and cognitive implications will be discussed concerning how the participants differed in the tasks.

Keywords

Socioeconomic Backgrounds; Academic Achievement; Immigrant Students; Assessment; Unskilled Jobs

Introduction

Recent studies on L2, but almost addressing English as a Second Language (ESL), have focused on the impact that different variables have on teaching and learning, both in informal and formal (classroom) contexts. Besides age, mother-tongue is a commonly analysed variable to determine how some learners develop a second or foreign language more successfully than others within the same context (Bialystok, Luk & Kwan, 2009; Hernandez, 2011).

Socioeconomic status (SES) variable correlated to variations for literacy and academic skills development of immigrant students is widely studied but mainly in English Speaking countries, neglecting examination in other European contexts (Suárez-Orozco & Carhill, 2008). One of our main limitations is the fact that L2 research is mostly on ESL, as well as the fact that research on groups of speakers and on the learning process is mainly on English language (Furman, Goldberg, & Lusin 2010). This accounts for Romance language acquisition as L2 or as a foreign language having been less studied to define linguistic and cognitive profiles of different immigrant students in European classrooms (Leeman 2015). L2 learning is also extremely related to immigration routes associated to family contexts, an important variable in explaining differences in academic performance (Entorf & Minoiu, 2005).

The teaching community must realize that L2 learning requires an analysis of the differences in proficiency (proficiency in writing does not necessarily mean an equivalent proficiency in oral production), in mother-tongues and in socioeconomic conditions of the students' families (Hulstijn, Young, Ortega et al., 2014). The professional situation of parents from immigrant minorities is commonly described as temporary and posing serious restraints to cognitive stimulation at home, thus, directly correlated to learning and intellectual development (Mistry et al., 2008). Additionally daily activities and family routines limit parents' availability to be involved in their children's school activities, which is detrimental to the correlation (Becker, 2009). We have realized that prior school experience is a variable to consider in our analysis of immigrant group behaviour (Yamamoto & Li, 2012); the Slavic population attending Portuguese schools is better prepared (as a consequence of the school system of their home countries) and more "school positive responding", whereas students from African countries (from Portuguese-speaking African countries), with no such previous positive experience (and no structured school experience), should be considered at risk (Figueiredo, Alves Martins, Silva & Simões, 2015).

This study aims to discuss the effect of the SES factor in the performance of linguistic minorities through comparing how learners of Portuguese as a Second Language from three different socioeconomic contexts complete tasks on vocabulary - semantic associations and picture naming - and on verbal reasoning - verbal analogy and morphological extraction. This paper presents a first part on literature developed for the evidence on socioeconomic difficulties associated to the effects in school achievement, then a data section with the results of our empirical study conducted in Portuguese schools with different immigrant groups of students with specific and distinct socioeconomic backgrounds that will be compared. In the sections 3 and 4, results will be presented and discussed in order to test the main hypothesis of this study and will be evidenced at-risk situations of skills and cognition development of immigrant students from specific lower socioeconomic backgrounds (with unemployed parents), regardless of nationality.

Linguistic and Socioeconomic Difficulties: Effects on School Involvement

Migrating movements are intimately related to the socioeconomic situation of the new generation of immigrants in our schools (Shifrer, Muller & Callahan, 2011). Teaching procedures in the context of a foreign language other than English are affected by the rhythm and the motivation inherent to the socioeconomic status of students and their families (Isaac, 2013). The goals and motivations underlying immigration are varied but, in general, socioeconomic factors are at its core (Isaac). The socioeconomic background will have an impact on access to resources and on the time needed for L2 learning (Giacomin, Janssen, Pruett et al., 2011). Moreover, disadvantaged socioeconomic contexts will compromise cognitive stimulating daily activities and learners' academic success development (Guendelman et al., 2005). Teacher awareness is crucial to resolve these issues. Not all schools and not all teachers are prepared to have immigrant learners and understand the specificities of their families and contexts (Furman et al., 2010; Liu & Hansen, 2002).

Immigrant socio-demographic groups are generally at a disadvantage in professional terms before fully adapting to the host country (Kaida, 2013). In Portugal, immigrants from Eastern Europe, Asia and Africa are all

economically disadvantaged (Figueiredo, Alves Martins & Silva, 2014; Giacomini, Janssen, Pruett et al., 2011); yet, prior instruction in their home country will influence their academic performance (Authors, 2014). Children from Eastern European countries appear to be better prepared than their peers, which is made manifest in their good academic performance (Figueiredo, Alves Martins & Silva, 2014). The learning rhythms of these minorities are very different, which is viewed as an issue in the school system, both in terms of the second language learning, as well as in terms of general academic success development. Following a thorough assessment on limited proficiency and different performance levels, professionals are able to identify the students at risk and develop support programmes (Zhou, Chu & Chen, 2012).

The home background of linguistic minorities should be studied so as to identify the languages spoken at home, which cultural representations affect students' perspective of the dominant culture and language, and which daily activities carried out by students foster school adaptation (Hoff, 2003). The professional situation of the parents determines daily and school routines (Mistry et al., 2008). Jonsson and Rudolphi (2011) analysed the effects of school success and dropout based on the nationalities of immigrant learners in Swedish schools. Students from non-European countries evidenced a poorer academic performance when compared to their peers. The behaviour and choices of European students depend positively from parents' involvement and encouragement to learning a second language (Hao & Bonstead-Bruns, 1998). The fact that families have low proficiency in the language of the host country will lead to less cognitive and academic stimulation of the students and to lower learning expectations (Becker, 2009; Mistry, Biesanz, Chien et al., 2008). On the other hand, maternal stimulation regarding second language development is a specific predictor of school success and motivation (Hernandez, 2011).

Several factors should be taken into account to identify an at-risk group, such as the immigrant group (Crosnoe & Turley, 2011). However, we contend that specific effects can be observed within the L1 and the L2 contexts, as the socioeconomic status of the families, whether immigrant or not, does influence the positive development of cognitive strategies (Hoff, 2003). Student performance varies according to the parents' job and socioeconomic status, which is linked to linguistic exposure and to experience and determines different cognitive activation. Student-family interaction (home context) is echoed in academic performance (Becker, 2009). How can interaction with parents and home background have an impact on L2 learning and specific cognitive skills development?

Academic and cognitive development of L2 learners will be compromised when living in difficult socioeconomic contexts (despite the age effect in L2 acquisition), since these directly affect literacy and learning (probably leading to slower learning processes, Hoff, 2003; Shifrer et al., 2011). Immigration is not only correlated to impoverished family situations but also to professional motivation and irregular socioeconomic backgrounds, mostly evident in speakers of Indo-Aryan languages (from Asian countries), of Romance languages (immigrating to America, as is the case of Spanish and Portuguese speakers), while Asian, and Slavic populations in particular, immigrate mostly to European countries (Giacomini et al., 2011). Support programmes for L2 learning are better organized in the USA since the 1960s, unlike what happens in European countries (Crosnoe & Turley, 2011; Capps et al., 2005; Giacomini, Janssen, Pruett et al., 2011). One of the major issues is the need to ensure that families have access to educational material that fosters L2 skills at home and, as a consequence, connect home and school objectives.

Shifrer et al. (2011) studied the disproportionate relation of school behaviour among immigrant minority groups. The main differences lay in terms of the impact of socioeconomic contexts in African and Hispanic minorities. Part of the Asian population in the United States, on the other hand, behaves very differently as a result of their social adaptation, which, in turn, depends on the political and economic power China represents for America (Lindholm-Leary, 2011). This explains the increase in the number of primary schools in America offering Mandarin as an optional course (Lindholm-Leary). In Portugal, Chinese immigration (the Asian minority which has evidenced reasonable performance rates) has focused on integration based on family involvement and on enrolling their children in mother-tongue courses in parallel with instruction in Portuguese within the same school facilities (schools in the district of Lisbon). Though support to other cultures is not as organized or involves the same

financial resources, the fact that Slavic minorities are better prepared (by attending schools in their home countries) constitutes an advantage when compared to African students (Zhang, 2013), who evidence difficulties in adjusting to European schools and educational systems, as observed in other dominant countries for immigration, such as Sweden (Jonsson and Rudolphi, 2011).

In Portugal, immigration from Eastern Europe and from African countries has very distinct profiles, especially in regards to cognitive stimulation (Figueiredo, Alves Martins, Silva & Simões, 2015). Compared to the latter, the former has the advantage of prior academic preparation, which is a crucial variable (Yamamoto & Li, 2012). In Portugal, the Hispanic population is not as relevant as in the USA, but it is also associated with economically disadvantaged individuals from South American countries (Valdés 2001). Studies have been conducted on disadvantaged situations related to socioeconomic factors mainly concerning Hispanics (Crosby & Dunbar, 2012; Valdés 2001). Yet, the focus has been on the correlation between the native population and reading proficiency, which would, for instance, explain school dropout or academic failure (Hernandez, 2011). In the context of L1, there is ample literature on how child-mother interaction influences linguistic stimulation (considering family routines and its effect at a younger age). On the other hand, the context of L2 presents different circumstances and other variables, such as how long and how exposed learners have been to the host country (Paradis, 2011).

The SES specificities of students and families are frequently neglected by Portuguese education professionals because priority is still given to assessment and to placing these students in the classroom, thus not allowing time for socioeconomic identification which differentiates profiles within the classroom. Literacy, even in L1, is harder for immigrant students whose families are not available because they do not have steady jobs or have more than one job (Halpern & Spielberger, 2002). Two issues are, therefore, made evident: the need to develop both L1 and L2 (Cummins, 2014). Moreover, lack of support in the two languages (or even more languages when the individual has more than one mother-tongue) is common in many European countries, as well as a low number of linguistic immersion programmes (Halle et al., 2012).

Children and adolescents from disadvantaged socioeconomic contexts and L2 teaching programmes are usually described as at-risk students in any teaching system, not only in the USA (Crosnoe & Turley, 2011). Future research should focus on these discrepancies and in the disproportionate relations among countries with immigrant students. International literature should be transferred to European contexts, such as the Portuguese, and replicated using adapted and adequate tools. Parental involvement, parents' education and family interaction are crucial factors to explain the academic performance of immigrant students attending different school levels (Becker, 2009). The type of early pre-school instruction should also be considered a variable to explore when studying immigrant students and their families considering that pre-school instruction might compensate developmental problems related to literacy of those children with different gains and stimulation at home (Halle et al., 2012). Although studies demonstrate consensus about on the correlation between low academic achievement of immigrant second-generation children and low-income or unemployed family backgrounds, very little work has explored that issue in the European school contexts and considering the effect of unspecialized jobs of parents related to higher scores in verbal reasoning and vocabulary development in L2, specifically. This study will examine the differentiated performance in four specific tasks of three groups in comparison: children whose parents are unemployed, whose job is unspecialized or whose job is specialized. Educational and developmental implications for immigrant children and their families, depending on the socioeconomic variable, will be discussed.

Study

This study is part of a post-doctoral research project to develop a Diagnostic Test regarding a second language. We aim to develop a 15-task diagnostic test and a general repository of assessment and intervention tools for Portuguese as a Second Language. For the Diagnostic Test, tasks, assessment and score criteria were based on information adapted from the following repositories: Alberta Education, Teachers of English to Speakers of Other

Languages (TESOL), Test of English as a Foreign Language (TOEFL), Diagnostic English Language Needs Assessment (DELNA), Woodcock-Munoz Language Survey Revised (2005), among other tests used in this field. The present research is based on a specific corpus of data related to verbal behaviour of 108 learners of Portuguese as a Second Language considering their families' socioeconomic status, defined according to the families' (un)employment situation and professional (un)specialization of parents' (father and mother) current job. Three groups of children, from unemployed families, from employed families in specialized job, and from employed families in unspecialized job, completed 4 independent tasks from the battery: identifying verbal analogies, picture naming, identification of semantic associations and morphological extraction.

Hypothesis:

Family environment has an impact on task performance considering professional situation (employment and professional specialization) of the parents (or tutors). Economically disadvantaged families (whose parents are unemployed or whose job is unspecialized) may be a predictor of different performances in Portuguese as L2, involving deficits for specific cognitive skills and literacy development in childhood and adolescence (which has consequences in general academic performance).

Participants

108 immigrants (most of whom immigrated to Portugal in 2010), age average = 13 (SD=2,7), 57 males and 46 females, attending primary, middle and secondary schools. Most participants were not born in Portugal (only 10 were born in Portugal but emigrated before starting school) and attended school in their parents' home countries. All the students came from lower to middle socioeconomic backgrounds. Participants were right-handed (laterality was identified) and attended public schools within the same geographical area: Lisbon. This sample was heterogeneous in terms of nationality (23) and home languages (28): 33 speakers of Mandarin, 32 speakers of Romance languages, 14 speakers of Slavic languages, 11 speakers of Portuguese-based creole, 10 speakers of Indo-Aryan languages, 2 speakers of Afro-Asian languages. Concerning age of acquisition, 14 students arrived to Portugal between 2001 and 2005, 21 between 2006 and 2009, 55 between 2010 and 2014. 61% immigrated in the most recent period. Attending to the length of residence (LOR) in Portugal, most of the participants have a LOR ranging between 3 years (2010) and few months (2014) (mean = 2009 (4 years); SD; 2,9). 21 has a LOR in Portugal of 3 years, 11 students has a LOR of 2 years, 18 has a LOR of 1 year and 9 arrived during 2013, few months before starting to include the empirical study. LOR and age (age of testing) were correlated and there were no significant differences. There is homogeneity (and normality) in this sample regarding the two variables.

Instruments

Task 1

Verbal Analogy Task: 6 items (based on Verbal Analogies Test n.º 2 of "Woodcock-Munoz Language Survey-Revised - WMLS-R, 2005) with internal correlation consistency (Cronbach's alpha) of .60. Score: 1 point for each correct answer (total score: 6 points). Example of sample items: "Estrela está para céu assim como peixe está para ____" (fill in the missing word by logic association: 'Star is for sky as fish is for ____').

Task 2

Recall Task: 36 items (based on the original task of Woodcock-Munoz Language Survey-Revised-WMLS-R, 2005). Students are introduced to different sequence of three written texts and they are asked to write the words that they recall after reading (with no second visual stimuli on the texts).

Task 3

Cognates: 4 items (based on August et al., 2001) with Cronbach's alpha .73. Item 5 was deleted to

improve alpha. Score: 1 point for each completed match (total score: 5 points). The cronbach value is higher than the original test consistency (.69). Example of sample items: Palavra: Amizade/ Frase: "Os colegas da escola são meus ____" (Word: friendship/ Sentence: "Colleagues from school are my ____").

Task 4

Naming task: 36 items (based on the original task of Portuguese diagnostic test from Ministry of Education, 2009). Cronbach's alpha of .94. Total score: 12 points. Students are introduced to 36 image cards and they are asked to write the name of each image on a paper.

Procedure

Data collection took place in 2013 and 2016 in Portuguese schools. The four tasks were administered according to the original procedure and scoring formats. In terms of psychometric properties, one of the tasks, on morphological extraction, evidenced limited internal consistency (.53). The original test in English presents a high Cronbach's coefficient (.93). Students completed the battery of tests (15 tasks) in 60 minutes in a classroom. Participants were divided into groups but individuals were tested individually. After authorization was given by the schools, participants were selected based on the following criteria: 7-17 years old, immigrants both with or without school experience in Portugal before emigration, proficiency in Portuguese between A1 and B1 levels, public schools. Tests were applied both in paper and in computer formats (sound files for phoneme and text decoding). Data was treated using SPSS (version 21).

Results

Hypothesis: Family environment has an impact on task performance considering parents' (or tutors') professional (and employment) situation and socioeconomic stability. Economically disadvantaged families (whose parents are unemployed or whose job is unspecialized) may be a predictor of different performances in Portuguese as L2 (which has consequences in general academic performance). Three groups were compared attending to professional situation of immigrant parents: children of parents employed in specialized jobs, children of parents employed in unspecialized jobs and children from unemployed families.

Series of analyses of variance (MANOVA) were conducted so as to examine the association between families' socioeconomic situation (the three groups) and the performance scores in the four tasks. As an independent variable, the socioeconomic situation was defined considering parents' current employment situation and professional category. Three categories were identified: specialized workers, unspecialized workers and unemployed. In terms of parents holding a job, specialization refers to having graduated or given training for a specific job. In terms of unspecialized workers, several house workers and cleaning related jobs were found. Statistical differences were significant ($p > .05$) regarding verbal analogy ($F = 4,411$; $p = .017$), semantic associations ($F = 3,988$; $p = .025$) and morphological extraction ($F = 3,433$; $p = .040$) (see Table 1).

Performance of students raised in unemployment contexts was worse in 3 tasks (score average, see Tables 1 and 2): verbal analogy 2,0; semantic association 1,7; morphological extraction: 0,3, when compared to students whose parents were employed (but had an unspecialized job): verbal analogy: 4,4; semantic association 6,8; morphological extraction: 3,8.

Statistical difference was only observed between children of unemployed and children of unspecialized workers. From the three groups, students whose parents had an unspecialized job performed the best in general. In terms of picture naming, no significant differences were found regarding families' professional situation. See more detailed data in Tables 1 and 2.

TABLE 1 ANALYSIS OF VARIANCE (MULTIVARIATE) – Part I: comparison of verbal behaviours depending on socioeconomic environment determined by immigrant families' job situation

Task		Sum of Squares	df	Mean Square	F	Sig.
Picture naming task	Between Groups	163,390	2	81,695	1,417	,253
	Within Groups	2768,257	48	57,672		
	Total	2931,647	50			
Verbal analogy	Between Groups	19,015	2	9,507	4,411	,017
	Within Groups	107,778	50	2,156		
	Total	126,792	52			
Semantic associations	Between Groups	77,754	2	38,877	3,988	,025
	Within Groups	487,378	50	9,748		
	Total	565,132	52			
Morphological change	Between Groups	34,586	2	17,293	3,433	,040
	Within Groups	251,867	50	5,037		
	Total	286,453	52			

TABLE 2 ANALYSIS OF VARIANCE – Part II: comparison of verbal behaviours depending on socioeconomic environment determined by immigrant families' job situation

Task	Parents job situation	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
						Lower Bound	Upper Bound
Semantic associations	Unspecialised workers	45	6,8444	3,11853	,46488	5,9075	7,7814
	Unspecialised workers	5	5,8000	3,56371	1,59374	1,3751	10,2249
	Unemployed	3	1,6667	2,08167	1,20185	-3,5045	6,8378
	Total	53	6,4528	3,29665	,45283	5,5442	7,3615
	Model			3,12211	,42885	5,5915	7,3142
	Random Effects				1,78932	-1,2460	14,1517
Picture naming	Unspecialised workers	43	33,0698	7,34975	1,12083	30,8078	35,3317
	Unspecialised workers	5	27,2000	10,80278	4,83115	13,7866	40,6134
	Unemployed	3	30,6667	4,04145	2,33333	20,6271	40,7062
	Total	51	32,3529	7,65721	1,07222	30,1993	34,5066
	Model			7,59421	1,06340	30,2148	34,4911
	Random Effects				1,89775	24,1876	40,5183
Verbal analogy	Unspecialised workers	45	4,3778	1,38644	,20668	3,9612	4,7943
	Unspecialised workers	5	3,4000	2,30217	1,02956	,5415	6,2585
	Unemployed	3	2,0000	1,00000	,57735	-,4841	4,4841
	Total	53	4,1509	1,56151	,21449	3,7205	4,5813
	Model			1,46818	,20167	3,7459	4,5560
	Random Effects				,89571	,2970	8,0049
Extraction	Unspecialised workers	45	3,8000	2,22179	,33121	3,1325	4,4675
	Specialised workers	5	4,0000	2,91548	1,30384	,3800	7,6200
	Unemployed	3	,3333	,57735	,33333	-1,1009	1,7676
	Total	53	3,6226	2,34706	,32239	2,9757	4,2696
	Model			2,24440	,30829	3,0034	4,2419
	Random Effects				1,16821	-1,4037	8,6490

Discussion

The results partially confirmed our hypothesis and evidenced at-risk situations of immigrant students from lower socioeconomic backgrounds (with unemployed parents), regardless of nationality. However, students whose parents had unspecialized jobs performed better than those whose parents had specialized jobs. Picture naming (task 3) presented no difference among the groups probably due to the fact that the image helped written identification, unlike what occurred in the other tasks, in which no image or additional information were provided (Zhang & Koda, 2008). The other three tasks required more demanding completion, as maintained in studies of Roomaney and Koch (2013) and of Woodcock-Munoz (2005), from a cognitive point of view (decoding by analogy,

morphological change, identifying semantic relations) and had different levels of lexical frequency (lexical frequency criteria, present in the selection of the words used in the exercises). Immigrant students whose parents belonged to the most disadvantaged group in professional terms (were unemployed) had less correct answers in verbal analogy (task 1), semantic association (task 2), and morphological modification (task 4). Particularly in terms of morphological extraction (the task 4), participants from more disadvantaged contexts evidenced a very similar (low) performance. This type of test requires very flexible cognitive capacity within an area of the language, which also depends from the type of literacy the individual is exposed to (DeKeyser et al., 2010). Morphological awareness (and capacity to use morphemes) depends on visual literacy (Zhang, 2013), which can be stimulated through L2 school books (texts and images). There are not many such resources in Portuguese schools and, in fact, other tools are more easily applied to teaching Portuguese as a mother-tongue. On the other hand, immigrant students have less access to contents in Portuguese at home, whether books or other resources.

Parents' professions appear as a critical stressor for families who immigrate, considering that leaving one's country is mostly related to employment and financial sustainability, as confirmed on previous studies (Reyneri & Fullin, 2010; Kaida, 2013). These stressors are felt by children and directly influence their learning objectives and linguistic (and psycho-social) development rhythms. Those tasks (1, 2 and 4) emphasized unequal performance among the participants as a consequence of their parents' distinct socioeconomic situation. Individuals whose economic situation was more stable (whose parents had a job) obtained higher scores in the tests, though the highest were achieved by those whose parents held an unspecialized job. According to the study of Hao and Bonstead-Bruns (1998), the conflict between immigrant parent's and children's educational preparation and resources facilitate the awareness of parents for the need of children's investment in school and academic development. On the other hand, Hao and Bonstead-Bruns observed that Chinese parents, compared to other immigrant families examined, were more devoted to ensure the academic development of their children. Interestingly, in our study, Chinese parents are the majority enrolled in unspecialized jobs and this might be an important variable explaining how immigrant Portuguese children from families with unspecialised jobs showed higher performance in verbal reasoning and in vocabulary tasks. Consistent to these results, other study (Bankston & Zhou, 2006) examined that Asian immigrants, despite the lowest levels of self-esteem, compared to other nationalities such as immigrant black children, presented the best levels of grade-point classifications. In the same study was confirmed that immigrant parent's socioeconomic status might be the main explanation for the highest grades of Asian students rather than self-esteem. Our results offer a new insight for the understanding of educational development of immigrant students in European context, relating unskilled parents and higher classification in the tests completed by Portuguese immigrant children, and replicating the results of previous authors examined in other school contexts non-European.

Unemployment appears as a negative predictor in regards to academic success in Portuguese L2 by immigrant minorities attending schools in Lisbon. Learning vocabulary in a second language is strictly related to literacy development at home (coexisting languages) and will, in proportionate positive relation, determine performance in tests similar to those we applied here, and lexical knowledge will depend on the type of activities conducted to foster literacy in minorities (DeKeyser et al., 2010). We understand that teachers and educationists should have access to a *corpus* information related to research in vocabulary acquisition, selection and testing (McCarthy, 2008; Pulido, 2006) as long as frequency lists provide accurate information on basic and complex words for SL learner (Tidball & Treffers-Daller, 2008). Cognitive stimulation and the promotion of literacy (focusing lexicon and reasoning abilities) depend on activities at home and at school (Mistry et al., 2008). Yet, the promotion of literacy in L2 at home is rather limited, which poses a restraint. The fact that more than one language is spoken at home may hinder learning at school, leading to different objectives being in place, which do not allow for academic achievements by this specific population.

Another stressor, besides the variable regarding family socioeconomic situation, is the difference between mother-

tongues and L2. According to Lervag and Aukrust (2010) the effort to decode a new language is increased with the degree of spelling inconsistency, as occurs in English, in opposition to more consistent spelling systems (easier to code and decode) of languages such as Spanish and German. The Portuguese phonetic system is rather complex, especially in regards to vowel diversity and specificity (Cardoso-Martins, 2005). Though Barcroft (2007) advocates that phonetic amplitude is irrelevant within the context of learning English as L2, we contend that this is a rather limited perspective when applied to other languages, as is the case of Portuguese, whose rather marked phonetic amplitude is an important predictor of decoding difficulties and of restraints to “understandability” (Cardoso-Martins, 2005). The phonemic transparency of the Portuguese writing system favours acquisition by speakers of other Romance languages, which belong to the same language family; on the other hand, speakers of languages from other language families will encounter more difficulties (Paradis et al, 2011), whether their languages are Indo-European or Indo-Aryan (for ex. Urdu) or Afro-Asian (for ex. Arabic) (Ashton, 2009). Literature on learning Romance languages is mostly on learning Spanish, as a consequence of its importance in American schools as previously argued in other sections (Valdés 2001). Studies on learning and integration of South American minorities to English as L2 aim to analyse the socioeconomic background of Hispanic populations and its impact on academic performance and on motivation towards L2 and to the culture of the dominant country (Crosby & Dunbar, 2012; Valdés 2001). On the other hand, Indo-Aryan languages and Asian populations become of great interest to scholars conducting recent studies on L2 and focusing on L2 learning constraints (Crosby & Dunbar, 2012).

A new generation of immigrants has emerged in Western European countries in the past few years, whose economic situation is disadvantaged and who seek professional opportunities in saturated markets of host countries such as Portugal. This leads to a risk scenario with consequences for school children. Thomson and Crul (2007) developed a comparative study to analyse the professional opportunities offered to individuals born during the post-war period, who immigrated and completed their education in European countries. School practice and job market were analysed so as to identify how countries respond to the success of a second generation in the period between graduation and starting to work. In the context using a sample of immigrant population for research, important scientific evidence proves that academic achievement of children from disadvantaged immigrant families varies in comparison with their native peers, when assessing specific factors as “nativity-based” are assessed, accounting for different school preparation among immigrant children (De Feyter & Winsler, 2009). One of the most studied immigrant population as previously stated within the field of L2 is the Hispanic population on the impact that their living and economic conditions have in the development of their bilingual competence (Valdés 2001) and on the influence of bilingual teaching programmes. Bilingual teaching programmes are an additional variable in the context of education of immigrant populations (Garver & Noguera, 2014). In America, speakers of Spanish as a mother-tongue are taken into account in school practice and in their cultural adaptation despite the difficulties posed by their families' poor living conditions (Garver & Noguera, 2014). 56% of schoolchildren from immigrant families are growing up in disadvantaged situations (Capps, Fix, Murray et al., 2005), which has consequences in terms of diverse cognitive and affective profiles coexisting in the schools of the host countries (Mistry et al. 2008). Support activities should be organized to develop language acquisition for children whose disadvantaged situations are related to school literacy. Moreover, these children should spend more time at school at an early stage of their adaptation process (Halpern & Spielberger, 2002). However, priority lies in building a battery of tools adequate for these at-risk schoolchildren and in conducting a diagnostic by means of applying internationally used tests, resources and descriptors, whose experience in terms of teaching and learning has been proven.

ACKNOWLEDGMENT

This work was supported by the Foundation for Science and Technology (FCT) under the Grant n.º SFRH/BPD/86618/2012; and Center of Psychology Research of Universidade Autónoma de Lisboa, Lisbon Portugal.

REFERENCES

- [1] American Psychological Association, Presidential Task Force on Educational Disparities. (2012). "Ethnic and racial disparities in education: Psychology's contributions to understanding and reducing disparities". Retrieved from <http://www.apa.org/ed/resources/racial-disparities.aspx>
- [2] Ashton, K. (2009). Comparing proficiency levels in an assessment context: the construct of reading for secondary school learners of German Japanese and Urdu in England. Ph.D. Thesis. University of Cambridge. uk.bl.ethos.596187.
- [3] August, D., Kenyon, D., Malabonga, V., Louguit, M., & Caglarcan, S. (2001). Extract the Base Test—English. Washington, DC: Center for Applied Linguistics.
- [4] Bankston, C., & Zhou, M. (2006). Being Well vs. Doing Well: Self-Esteem and School Performance among Immigrant and Nonimmigrant Racial and Ethnic Groups. *International Migration Review*, 36(2), 389–415.
- [5] Barcroft, J. (2007). Effects of Word and Fragment Writing During L2 Vocabulary Learning. *Foreign Language Annals* 40, 713-726.
- [6] Bialystok, E., Luk, G., & Kwan, E. (2009). Bilingualism, Biliteracy, and Learning to Read: Interactions Among Languages and Writing Systems. *Scientific Studies of Reading*, 9(1), 43-81.
- [7] Becker, B. (2009). Who Profits Most from Early Parental Investments? The Effects of Activities Inside and Outside the Family on German and Turkish Children's Language Development. *Child Indicators Research*, 3, 29-46.
- [8] Becker, B., Klein, O., & Biedinger, N. (2013). The Development of Cognitive, Language, and Cultural Skills From Age 3 to 6. A Comparison Between Children of Turkish Origin and Children of Native-Born German Parents and the Role of Immigrant Parents' Acculturation to the Receiving Society. *American Educational Research Journal*, 28, 1-32. doi: 10.3102/0002831213480825.
- [9] Capps, R., Fix, M., Murray, J., Jason, O., Passel, J., & Hernandez, S. (2005). "The New Demography of America's Schools: Immigration and the No Child Left Behind Act". Report. Urban Inst., Washington, DC.
- [10] Cardoso-Martins (2005). Beginning reading acquisition in Brazilian Portuguese. In F. Joshi, & P. Aaron (Eds.), *Handbook of Orthography and Literacy* (pp. 179-218). Lawrence Erlbaum.
- [11] Chiswick, B., & Miller, P. (2005). Linguistic distance: a quantitative measure of the distance between English and other languages. *Journal of Multilingual and Multicultural Development*, 26(1), 1-11.
- [12] Crosby, D. & Dunbar, A. (2012). Patterns and predictors of school readiness and early childhood success among children in black immigrant families. Migration Policy Institute.
- [13] Crosnoe, R., & Turley, R. (2011). K-12 Educational Outcomes of Immigrant Youth. *The Future of Children* 21, 129-152.
- [14] Cummins, J. (2014). Detangling the lies about english-only and bilingual education. In P. Gorski & K. Zenkov (Eds.), *The Big Lies of School Reform: Finding Better Solutions for the Future of Public Education* (pp. 53-65). Routledge.
- [15] DeKeyser, R., Alfi-Shabtay, I., & Ravid, D. (2010). Cross-linguistic evidence for the nature of age effects in second language acquisition. *Psycholinguistics* 3, 413-438.
- [16] De Feyter, J., & Winsler, A. (2009). The early developmental competencies and school readiness of low-income, immigrant children: Influences of generation, race/ethnicity, and national origins. *Early Childhood Research Quarterly* 24, 411–431.
- [17] Entorf, H., & Minoiu, N. (2005). What a Difference Immigration Policy Makes: A Comparison of PISA Scores in Europe and Traditional Countries of Immigration. *German Economic Review*, 6(3), 355–376.
- [18] Figueiredo, S., Alves Martins, M., & Silva, C. (2014). New methodologies for second language assessment: measuring and identifying profiles in migrant school contexts. IATED Digital Library, 5607-5614. ISBN: 978-84-616-8412-0.
- [19] Figueiredo, S., Alves Martins, M., Silva, C., & Simões, C. (2015). Second language education context and home language effect: language dissimilarities and variation differences in immigrant student's outcomes. *International Journal of Multilingualism* (SJR: 0.47), 2015 Doi:10.1080/14790718.2015.1079204

- [20] Furman, N., Goldberg, D., & Lusin, N. (2010). Enrollments in Languages Other Than English in United States Institutions of Higher Education. The Modern Language Association of America.
- [21] Garver, R., & Noguera, P. (2014). Supported and Unsafe The Impact of Educational Structures for Immigrant Students on School Safety. *Youth Violence and Juvenile Justice*, 28. 10.1177/1541204014547594
- [22] Guendelman, S., Angulo, V., Megan, W., & Doug, O. (2005). Overcoming the Odds: Access to Care for Immigrant Children in Working Poor Families in California. *Maternal and Child Health Journal*, 9, 351-362.
- [23] Giacomini, F. Janssen, M. Pruett, M., R. Shinnar, F. Llopis, & B. Toney. (2011). Entrepreneurial intentions, motivations and barriers: Differences among American, Asian and European students. *International Entrepreneurship and Management Journal*, 7, 219-238.
- [24] Halle, T., Hair, E., Wandner, L., McNamara, M., & Chien, N. (2012). Predictors and outcomes of early versus later English language proficiency among English language learners. *Early Childhood Research Quarterly* 27, 1– 20.
- [25] Hao, L., & Bonstead-Bruns, M. (1998). Parents Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students. *Sociology of Education*, 71(3), 175-198.
- [26] Halpern, R., & Spielberger, J. (2002). The Role of After-School Programs in Children's Literacy Development. Chapin Hall Center for Children at the University of Chicago.
- [27] Hernandez, D. (2011). "Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation". Annie E. Casey Foundation: <http://gradelevelreading.net/wp-content/uploads/2012/01/Double-Jeopardy-Report-030812-for-web1.pdf>
- [28] Hoff, E. (2003). "Causes and consequences of SES-related differences in parent-to-child speech". In Marc H. Bornstein and Robert H. Bradley (Eds.), *Socioeconomic status, parenting, and child development* (147-160). NJ: Lawrence Erlbaum.
- [29] Hulstijn, J., Young, R., Ortega, L., Bigelow, M., DeKeyser, R., Ellis, N., Lantolf, J., Mackey, A., & Talmy S. (2014). Bridging the gap: cognitive and social approaches to research in SL learning and teaching. *Studies in Second Language Acquisition*, 1-61. Doi:10.1017/S0272263114000035.
- [30] Isaac, J. (2013). *Economics of Migration*. Routledge.
- [31] Jonsson, J., & Rudolphi, F. (2011). Weak Performance, Strong Determination: School Achievement and Educational Choice among Children of Immigrants in Sweden. *European Sociological Review* 27, 487-508.
- [32] Kaida, L. (2013). Do host country education and language training help recent immigrants exit poverty? *Social Science Research*, 42(3), 726–741.
- [33] Leeman, J. (2015). Critical approaches to teaching Spanish as a local/foreign language. In M. Lacorte, (Ed.), *The Routledge Handbook of Hispanic Applied Linguistics* (pp. 277-292). New York: Routledge.
- [34] Lervag, A., & Aukrust, V. (2010). Vocabulary knowledge is a critical determinant of the difference in reading comprehension growth between first and second language learners. *Journal of Child Psychology and Psychiatry* 51, 612–620.
- [35] Lindholm-Leary, K. (2011). Student outcomes in Chinese two-way immersion programs: language proficiency, academic achievement, and students' attitudes. In D. Teddick, D. Christian & T. Fortune (Eds.), *Immersion Education: Practices, Policies, Possibilities* (pp. 81-103).
- [36] Liu, J., & Hansen, J. (2002). Peer response in second language writing classrooms. *The Michigan Series on Teaching Multilingual Writers*.
- [37] Ministry of Education. *Diagnostic Tests for the Portuguese as a Second Language*. Portugal: Ministry of Education, 2009.
- [38] Mistry, R., Biesanz, R., Chien, N., Howes, K. and A. Benner. 2008. "Socioeconomic status, parental investments, and the cognitive and behavioral outcomes of low-income children from immigrant and native households". *Early Childhood Research Quarterly*, 23, 193–212.

- [39] Paradis, J. (2011). Individual differences in child English Second Language Acquisition: comparing child-internal and child-external factors. *Linguistic Approaches to Bilingualism*, 1(3), 213-237.
- [40] Roomaney, R. & Koch, E. (2013). An item and construct bias analysis of two language versions of a verbal analogies scale. *Psychology*, 314-32.
- [41] JShifrer, D., Muller, C., & Callahan, R. (2011). Disproportionality and Learning Disabilities: Parsing Apart Race, Socioeconomic Status, and Language. *Journal of Learning Disabilities* 44, 246-257.
- [42] Suárez-Orozco & Carhill (2008). Afterword: New directions in research with immigrant families and their children. In H. Yoshikawa & N. Way (Eds.), *Beyond the family: contexts of immigrant children's development* (pp. 87-104). *New Directions for Child and Adolescent Development*.
- [43] Thomson, M., & Crul, M. (2007). The Second Generation in Europe and the United States: How is the Transatlantic Debate Relevant for Further Research on the European Second Generation? *Journal of Ethnic and Migration Studies*, 33, 1025-1041.
- [44] Valdés, G. 2001. Learning and Not Learning English: Latino Students in American Schools. *Multicultural Education Series*. ERIC Number: ED451278.
- [45] Woodcock, R., Munoz-Sandoval, A., Ruef, M., & Alvarado, G.. (2005). *Woodcock-Munoz Language Survey – Revised, English*. Itasca, IL: Riverside Publishing.
- [46] Yamamoto, Y., & Li, J. (2012). What makes a high-quality preschool? Similarities and differences between Chinese immigrant and European American parents' views. *Early Childhood Research Quarterly*, 27(2), 306–315.
- [47] Zhang, Y. (2013). Linguistic distance effect on cross-linguistic transfer of morphological awareness. *Applied Psycholinguistics*, 34(5), 917-942.
- [48] Zhang, Y., & Koda, K. (2008). Literacy development in Chinese as a heritage language. In Agnes W. He and Yun Xiao (Eds.), *Chinese as a heritage language: fostering rooted world citizenry* (pp.137-149). Honolulu University of Hawai'i: National Foreign Language Research Center.

Sandra Figueiredo was born in Portugal, 1982. Has a Degree in Classical Languages Teaching (2005) and a PhD in Psychology (2010), both by University of Aveiro, Portugal. Currently a post-doctoral position and is Assistant Professor in Psychology, in Universidade Autónoma de Lisboa and also a Researcher of ISPA-Instituto Universitário, Lisbon, Portugal.

She has three paper awards since 2009 in the Psychology area considering presentations at scientific meetings worldwide. She accomplished doctoral programs and training at Universitat Autònoma de Barcelona, Universidade Federal de Santa Catarina and Princeton University.

Margarida Alves Martins is a Full Professor of ISPA-Instituto Universitário, Lisbon, Portugal.

Carlos Silva is a Full Professor of University of Aveiro, Portugal.

Corresponding author and co-authors are active researchers and have a strong record of high-quality publications in the areas of Education, Psychology, Educational Psychology and in Neurosciences. Themes they are developing are related to the second language learners' assessment, cognition and students achievement, instruments validation for schools and for skills evaluation, invented spelling and writing, experimental studies in educational field, chronobiology and school, among others.