THE AVAILABLE ENGLISH LEXICON OF MALE AND FEMALE SPANISH ADOLESCENTS

EL LÉXICO DISPONIBLE EN INGLÉS DE CHICOS Y CHICAS ESPAÑOLES ADOLESCENTES

Rosa María Jiménez Catalán
Universidad de La Rioja, Spain
rosa.jimenez@unirioja.es

Andrés Canga Alonso
Universidad de La Rioja, Spain
andres.canga@unirioja.es

This study explores the available English lexicon of Spanish adolescents in the twelfth form. It combines a quantitative and qualitative analysis of the English words produced by males and females in a lexical availability task. The objectives are twofold. Firstly, we identify the number of words retrieved by each group in response to nine prompts related to learners' realities, such as 'Food & drink', 'Clothes', 'School', or 'Hobbies'. Secondly, we analyse the most frequent words retrieved by males and females to ascertain whether patterns of gender variation are observed. Overall, the results indicated more similarities than differences. A closer analysis on the means points to the absence of significant differences in the number of words produced by males and females both for the whole task and per prompt. However, differential tendencies were also observed in the

exclusive words for each group that were found in the prompts 'Professions' and 'Clothes'.

Key words: Gender in foreign language education, available L2 lexicon, L2 word association

Este estudio analiza el léxico disponible en inglés de adolescentes españoles de 2° de Bachillerato. Combina un análisis cuantitativo y cualitativo de las palabras producidas por los chicos y las chicas en una tarea de disponibilidad léxica en inglés. La investigación tiene un doble objetivo. En primer lugar, identificar el número de palabras producidas por cada grupo en respuesta a nueve centros de interés relacionados con la vida cotidiana de los participantes, tales como: 'Alimentos y bebidas ', 'la Ropa', 'la Escuela' o 'Pasatiempos'. En segundo lugar, se analizan las palabras más frecuentes producidas por los chicos y las chicas para determinar si se observan patrones de variación de género. En general, los resultados muestran más similitudes que diferencias entre los grupos. Un análisis más detallado de los resultados apunta a la ausencia de diferencias significativas en el número de palabras producidas por los estudiantes, tanto en la prueba en su conjunto como para cada centro de interés. Sin embargo, también se observan tendencias diferenciales en las palabras que son exclusivas para cada grupo y se encuentran en los centros de interés "Profesiones" y "la Ropa".

Palabras clave: *G*énero en la enseñanza de lenguas extranjeras, léxico disponible en L2, asociación de palabras en L2

1. Introduction

This study explores the mental lexicon in English as a foreign language (EFL) of a group of Spanish adolescents. It aims to contribute to gender and foreign language research by identifying and comparing the words that Spanish male and female adolescents provide in English when asked to respond to prompts related to ordinary life. The study of the words that EFL learners have in their mind can tell us about the nature of their vocabulary knowledge in the target language and about the structure of their lexicon at distinct stages of second or foreign language (L2) acquisition. It can also reveal critical issues related to gender and education,

such as potential inequality of the known L2 vocabulary of male and female students in any course. Moreover, as words convey thoughts, emotions and attitudes (Chung & Pennebaker, 2007; Pennebaker, Mehl, & Niederhoffer, 2003), the study of the words that EFL learners have in their mind might reveal how males and females perceive daily realities through the lens of a foreign language.

However, EFL learners' lexicon in the target language is not directly observable unless it is activated by a topic or situation. One way to obtain insights into learners' mental lexicons is by asking them to accomplish lexical availability tasks; these are based on the association of prompts and the words generated in response to those prompts. In this regard, lexical availability tasks are also known as word availability tasks, word association tasks, semantic category tasks and word fluency tasks (see for instance, Ardila, Ostrosky-Solís, & Bernal, 2006; Martin, Lalonde & Mack., 1994; Hell & de Groot, 1988; Baumeister, 1985).

Lexical availability tasks are based on the following theoretical assumptions. Firstly, words are potentially available in the mental lexicon, but are not activated unless the topic or situation requires them. Secondly, the first words that come to mind are the most readily available. Thirdly, the words retrieved may not be the most frequent words in a language, but they are the words required by the theme or topic. This is what occurs, for example, when teachers refer to the pupils, course books, notebooks, blackboard, chalk, pencils or timetables at school, or need to discuss homework, exams or marks (Jiménez Catalán & Dewaele, 2017).

Despite its potential, lexical availability research on gender in foreign language education is scarce, as will be shown in the next section. At this point, it is important to clarify that we use the terms 'sex' and 'gender' interchangeably to refer to both sex and gender, the former being traditionally understood as the biological distinction of male/female, and the latter as the attributes associated with each sex by society. In agreement with numerous scholars (Cameron, 2010; Sunderland, 2000; Coates, 2004; Pavlenko, 2004; Mills, 2002; Ehrlich, 1997), we believe that gender is a social concept that is liable to variation. For example, in the context of foreign language education, we might anticipate gender variation depending on the course and on the age of the learners.

2. The Factor of Sex/gender in the Research on SLA and L2 Lexical Availability

Gender in foreign language education has rarely attracted research in second language acquisition (SLA) (Block, 2002). This situation has improved in recent decades due to the publication of monographs and seminal articles on gender in the acquisition of second or foreign languages (Elsner & Lohe, 2016; Jiménez Catalán, 2010; Agustín Llach, 2009; Carr & Pauwels, 2006; Norton & Pavlenko, 2004; Jiménez Catalán, 2003; Chavez, 2001; Sunderland, 2000). However, most of this research has aimed at the identification of discourse markers and vocabulary in narratives written by male and female second language learners in immersion contexts (Jule, 2010; Norton & Pavlenko, 2004), or at the analysis of the vocabulary used in letters and emails by male and female EFL learners in primary school contexts (Jiménez Catalán & Ojeda Alba 2008; Jiménez Catalán & Ojeda Alba 2009; Agustín Llach, 2009; Kaur, 2009). More recently, a substantial body of work that investigates the vocabulary of EFL learners by means of lexical availability tasks has emerged in SLA. As shown in Table 1, this research differs considerably concerning the target language, the country, and the educational level of the subjects. Even within the same educational level, differences are observed in the specific form under investigation. However, these studies were driven by a common purpose, namely that of determining whether there were gender differences in terms of the number of words retrieved by males and females in an equal amount of time. As can be observed, the means reported in these studies revealed a differential pattern in favour of female EFL learners: They systematically produced a higher number of words than did their male counterparts in primary, early secondary and tertiary education, both in English and in Spanish as an L2.

Although the tendency in favour of females seems clear, there might be the possibility of not being significantly different as some studies did not apply inferential statistics to prove their findings. Likewise, concerning English as an L2, more research is necessary as we do not know whether the quantitative differences in favour of girls reported in primary or early secondary education will be also observed in EFL learners in post-secondary education. Furthermore, at any educational level, we do not know which words L2 learners associate with prompts related to daily issues, and whether males and females

Study	L2	Learning Context	Sample	Prompts	Mean (types)
Jiménez Catalán & Ojeda Alba 2009	English	6th Form Spain	110 boys, 110 girls	15	Boys: 99.07 Girls: 119
Fernández Fontecha, 2010	English	8th Form Spain	139 boys 111 girls	6	Boys: 74.01 Girls: 83
Jing, 2012	Spanish	University China	63 boys 200 girls	16	Boys: 146 Girls: 157
Sandu, 2012	Spanish	12th Form Romania	204 boys 76 girls	16	Boys: 124.09 Girls: 173
González Fernández 2013	Spanish	12th Form Turkey	46 boys 32 girls	16	Boys: 65 Girls: 72
Agustín Llach & Fernández Fontecha, 2014	English	6th Form 9th Form Spain	106 boys 84 girls	9	Boys: 23 (6th Form). 111 (9th Form) Girls: 86.5 (6th Form), 129 (9th Form)
Samper, 2002	Spanish	University Spain	17 boys	16	Means in favour of females in 15 prompts.

Table 1. Gender outcomes in L2 lexical availability studies

produce different or similar words in lexical availability tasks. Previous studies provided information about the number of words, but not about the actual words produced by males and females. Thus, the present study attempts to contribute to L2 gender lexical availability research by means of the identification and analysis of the most frequent English words associated with three prompts related to daily issues by male and female adolescent EFL learners in the twelfth form. Our research questions were as follows:

1.   Do male and female EFL learners differ in the average number of words produced in the lexical availability task?

2.   Which words are retrieved most frequently by male and female EFL learners in response to the most productive prompts?

3. Methodology

3.1. Participants

The sample comprised 265 (171 females and 94 males) second year baccalaureate (equivalent to twelfth form) EFL learners from five state high schools located in La Rioja, a monolingual community in the north of Spain. Students answered a background questionnaire to provide researchers with information about their mother tongue, other languages they spoke at home or in their social interactions, their gender and their previous exposure to English. The questionnaire responses revealed that 95.47% of the informants were Spanish L1 speakers and did not speak any other language at home. The remaining 4.53% used other languages at home since their parents had not been born in Spain. These languages were Romanian (1.89), Arabic (1.13), Portuguese (0.68), Armenian (0.38) and Georgian (0.38). Nevertheless, they spoke Spanish at school, with their friends and in their daily social encounters.

High school head teachers signed a consent form in order for the tasks to be administered. They also informed the students' parents and tutors. The students whose families did not consent to them taking part in the tasks moved to another room while their classmates accomplished the tasks.

3.2. Data Collection and Procedures

Students were presented with the background questionnaire mentioned in the previous section, and with a written lexical availability task consisting of nine prompts in English, which were provided in the following order: 'Parts of the Body', 'Clothes', 'Food & Drink', 'School', 'Town', 'Countryside', 'Animals', 'Hobbies' and 'Professions'. The order was identical for all students as to warrant the same conditions in the data collection and task administration processes. Each prompt was written in bold capital letters at the top of the page, with one page per prompt.

Numbered lines were provided on each page to facilitate the researchers' identification of the order of the responses.

The selection of the prompts was based on the following criteria:

1. Their inclusion in previous lexical availability research on foreign language learners; this provided us with a framework for comparing the results derived from the present study;
2. their potential to elicit words related to learners' realities, as well as to uncover possible gender differences; and
3. learners' previous exposure to the semantic field represented by the prompt throughout primary and secondary education.

Students were told to respond to each prompt individually and not to move on to the following prompt until instructed to do so by the researchers. They were given two minutes to write down as many words as possible in response to each prompt. The time was controlled by a stop watch by the researchers. Instructions were given in Spanish, both orally and in written form.

Each student was given a code number to ensure anonymity. The data were codified in Excel files according to the following variables: L1, number of languages known/spoken, age, sex/gender, and number of different words (types) produced in response to each prompt per student. Prior to this, the corpus was edited following previous L2 English lexical availability studies (Jiménez Catalán and Ojeda Alba, 2009; Samper Hernández & Jiménez Catalán, 2014). The criteria were as follows:

   i. correcting spelling errors;
   ii. counting repeated words in the same prompt only once;
   iii. removing Spanish words and proper nouns, except for those that referred to cities or countries in their English version (such as London or Sweden);
   iv. lemmatising plural words as the singular form unless they were plural in English (for example, trousers);
   v. changing verb forms to bare infinitives unless they appeared as lexical entries in dictionaries;
   vi. keeping irregular verb forms and counting them as different tokens;
   vii. counting abbreviations (such as *mum*) if they were included as lexical entries in dictionaries;

viii. hyphenation of lexical units with a lexicalised meaning (for example, *fish-and-chips*);
  ix. deleting the titles of films, books or songs, and
  x. controversial words, including shortened forms such as *TV* or *mum* were checked in two on-line dictionaries (Wordreference.com and Cambridge Online) to verify that they were included as entries corresponding to separate English words.

The edited responses of each student were then entered into a Microsoft Excel© file in order to run a quantitative analysis. In addition, the edited data were stored as a series of plain text files. Wordsmith Tools version 5 was used to identify the words retrieved most frequently by males and by females. Finally, SPSS 24 was used to determine values of significance.

4. Results

Considering the whole sample (males and females all together) and the nine prompts in the lexical availability task, 12th EFL learners produced as average 141.5 words (SD= 42.9). Table 2 shows the maximum and minimum values as well as the means and standard deviations per prompt for the whole sample.

Prompt	Min.-Max.	Mean (SD)
Body	0 - 30	15 (5.3)
Clothes	3 - 30	12.7 (5.3)
Food & Drink	4 - 39	18.2 (6.1)
School	1 - 37	19.8 (6.2)
Town	2 - 37	16 (5.7)
Countryside	0 - 34	12.5 (6.9)
Animals	5 - 32	16.8 (5.5)
Hobbies	0 - 34	15.3 (5.8)
Professions	0 - 34	15.3 (5.8)

Table 2. Descriptive statistics per prompt

Our first research question aimed at ascertaining whether there would be gender differences in the average number of words generated by male and female EFL learners.

Table 3 shows the means of words retrieved by males and females for the whole task as well as per prompt. Our results do not corroborate the tendency in favour of females reported in previous lexical availability research. Contrary to expectations, a differential pattern in favour of males can be observed, and males obtained higher mean values in all the prompts except for 'Clothes' and 'Food & Drink', for which females provided a slightly higher number of words. However, the t-test applied to the means points to the absence of significant differences in the number of words produced by males and females both for the whole task (nine prompts) and per prompt.

	Mean (SD)		*t*-Student	
	Males	**Females**	*t*(263)	*p*-value
Total	142.6 (45.8)	140.9 (41.2)	0.299	0.765
Body	15.7 (5.5)	14.6 (5.1)	1.571	0.117
Clothes	12.5 (5.5)	12.8 (5.2)	-0.4	0.689
Food & Drink	17.4 (6.3)	18.7 (5.9)	-1.628	0.105
School	19.8 (6.3)	19.7 (6.2)	0.116	0.908
Town	16.1 (6.2)	15.9 (5.4)	0.304	0.762
Countryside	12.5 (7.1)	12.4 (6.9)	0.136	0.892
Animals	17.6 (5.9)	16.3 (5.2)	1.777	0.077
Hobbies	15.5 (6.5)	15.2 (5.4)	0.3	0.764
Professions	15.5 (6.5)	15.2 (5.4)	0.3	0.764

Table 3. Descriptive and inferential statistics for the number of words (types) produced by males and females

Table 4 displays the number and percentage of males and females who were above and below the means. The close inspection of percentages

reveals that over 50% of the females achieved the mean values in six prompts: 'Animals', 'Parts of the Body', 'School', 'Professions', 'Countryside' and 'Hobbies', whereas over 50% of males only attained those values in two prompts, namely 'Parts of the Body' and 'Clothes'. Nevertheless, the inferential Chi-squared test which was used to compare the results obtained by the two groups indicated that the percentage of students who were above or below the mean was similar in males and females.

	Total, n (%)	Sex n (%)		Chi-squared test	
		Males	**Females**	**$\chi 2(1)$**	**p-value**
TOTAL words				0.064	0.8
Below	141 (53.2)	51 (54.3)	90 (52.6)		
Above	124 (46.8)	43 (45.7)	81 (47.4)		
Parts of the Body				1.766	0.184
Below	147 (55.5)	47 (50)	100 (58.5)		
Above	118 (44.5)	47 (50)	71 (41.5)		
Clothes				0.362	0.547
Below	140 (52.8)	52 (55.3)	88 (51.5)		
Above	125 (47.2)	42 (44.7)	83 (48.5)		
Food & Drink				3.465	0.063
Below	146 (55.1)	59 (62.8)	87 (50.9)		
Above	119 (44.9)	35 (37.2)	84 (49.1)		
School				0.402	0.526
Below	134 (50,6)	50 (53.2)	84 (49.1)		
Above	131 (49.4)	44 (46.8)	87 (50.9)		
Town				0.088	0.767
Below	149 (56.2)	54 (57.4)	95 (55.6)		
Above	116 (43.8)	40 (42.6)	76 (44.4)		

	Total, n (%)	Sex n (%)		Chi-squared test	
		Males	**Females**	**χ2(1)**	**p-value**
Countryside				0.017	0.897
Below	148 (55.8)	53 (56.4)	95 (55.6)		
Above	117 (44.2)	41 (43.6)	76 (44.4)		
Animals				0.06	0.807
Below	138 (52.1)	48 (51.1)	90 (52.6)		
Above	127 (47.9)	46 (48.9)	81 (47.4)		
Hobbies				0.098	0.755
Below	146 (55.1)	53 (56.4)	93 (54.4)		
Above	119 (44.9)	41 (43.6)	78 (45.6)		
Professions				0.098	0.755
Below	146 (55.1)	53 (56.4)	93 (54.4)		
Above	119 (44.9)	41 (43.6)	78 (45.6)		

Table 4. Distribution and comparison of the number and percentage of males and females below and above the means

To determine the effect of the sex/gender variable, the type of prompt, and the interaction of both variables in the number of words produced, a two-factor ANOVA model was performed through the General Linear Model (GLM). As Table 5 shows, neither the variable sex nor the interaction or sex/prompt did have a significant effect on the number of words produced. On the contrary, the type of prompt did have a significant effect on the results. This means that the type of prompt affects the number of words produced but not sex (p= <-0.001).

We now move to our second question in which we aimed to identify the actual words produced by the two sexes. Due to space limitations, we will limit our analysis to the 10 most frequent words generated by males and females, respectively, in response to three prompts: 'Professions', 'Clothes', and 'Animals'.

Factor	Effect tests		
	F(g.l.)	***p*-value**	***eta2***
Sex	$F(1;2367) = 0.536$	0.464	0.001
Type of prompt	$F(8;2367) = 38.972$	**< 0.001**	0.116
Sex*Type of prompt	$F(8;2367) = 0.931$	0.49	0.003

Table 5. Model ANOVA. Contrasts g.l.: degrees of freedom. *eta2*: effect size

Regarding 'Professions', the first words that came to the learners' mind when put into a situation to activate their English lexicon related to this semantic field are shown in Table 6. A first look at these data points to the existence of similarities rather than differences. Firstly, there is a high degree of overlap in the two groups, as *teacher*, *policeman*, *doctor*, *fireman*, *lawyer, nurse* and *police* are all in the males' and females' 10 top words. Secondly, the words retrieved by males and females point to middle-class jobs, as neither males nor females produced words associated with labour on farms or in factories. Thirdly, *teacher* seemed to be a typical association with 'Professions' in both groups, as suggested by the high percentage of males and females who associated this word with 'Professions'. Gender similarity was also observed in the 10 top responses to 'Clothes' and 'Animals', particularly in the latter, in which the top ten list was shared by the two groups. Similarly, *t-shirt* and *dog* seemed to be typical associations with 'Clothes' and 'Animals', respectively, in both groups.

However, a close inspection of the words also revealed differential tendencies according to gender that should not be overlooked. For example, with respect to 'Professions', and referring to the 10 top words, we observed that *engineer*, *politician* and *professor* were exclusive to boys, whereas *singer*, *musician* and *shop assistant* were exclusive to girls. (Following conventions in sex/gender studies, we use the term exclusive to refer to the vocabulary that it is not shared by females and males, that is, the vocabulary that is produced or used by one sex but not by the other sex). Similarly, we found *sock(s)* and *glove(s)* in the boys' 10 top list but not in the girls' list, while *skirt* and *dress* were found in the girls' list but not in that of the boys.

Males n=94			Females n=171		
Professions	**Clothes**	**Animals**	**Professions**	**Clothes**	**Animals**
teacher 95.6	*T-shirt* 94.7	*dog* 97.9	*teacher* 98.2	*T-shirt* 97.7	*dog* 97.7
policeman 37.2	*trousers* 85.1	*cat* 96.8	*doctor* 37.4	*trousers* 78.4	*cat* 96.5
engineer 27.7	*shoe* 81.9	*bird* 71.3	*nurse* 33.9	*shoe* 77.2	*bird* 75.4
politician 26.6	*jeans* 72.3	*lion* 66.0	*policeman* 29.2	*jeans* 76.0	*lion* 67.3
doctor 24.5	*jacket* 59.6	*tiger* 54.3	*singer* 27.5	*jacket* 63.7	*fish* 66.7
fireman 24.5	*hat* 57.4	*fish* 52.1	*lawyer* 25.7	*skirt* 59.6	*horse* 56.7
lawyer 24.5	*shirt* 56.4	*elephan*t 51.1	*fireman* 24.0	*dress* 54.4	*snake* 55.0
nurse 23.4	*trainers* 50.0	*horse* 50.0	*musician* 20.5	*shirt* 48.5	*tiger* 53.2
police 23.4	*sock* 44.7	cow 48.9	*shop assistant* 18.1	*trainers* 45.6	cow 51.5
Professor 22.3	*glove* 39.4	snake 47.9	*police* 16.4	*hat* 42.1	elephant 49.1

Table 6. Gender tendencies in top 10 words.

5. Discussion and Conclusion

This study explored the available English lexicon of adolescent male and female Spanish EFL learners. Specifically, our concern was to determine whether there were similarities or differences in the average number of words retrieved by males and females and to identify the actual words produced by each sex. Regarding the average number of words, our results did not confirm those of previous studies, as no significant differences

between males and females were found in the present study. Concerning the words generated by males and females in response to 'Professions', 'Clothes' and 'Animals', and as reported in the previous section, the quantitative and qualitative analyses of the most commonly retrieved words reveal almost identical patterns in males' and females' available lexical output.

The patterns of similarity observed in the lexical availability performance of male and female EFL learners in the present study can be explained by the fact that English is a compulsory language in Spanish primary, secondary and post-secondary education. There is a national syllabus for each educational stage that teachers must follow when planning lessons and exams. Girls and boys receive English instruction in mixed classrooms in which they are exposed to identical input, methods and activities, including exams. It seems logical, then, that there should not be major differences in the 10 top words produced by our sample of male and female EFL learners.

What do male and female EFL learners' words reveal? Firstly, they suggest a high degree of standardisation. For example, *t-shirt*, *trousers*, *shoes, jeans*, *jackets* and *trainers* can be regarded as unisex items of clothing used indiscriminately by men and women at present (Davis, 1992). Similarly, *dogs*, *cats*, *birds* and *fish* are typical pets that are found frequently in Spanish homes; *cows* and *horses* are familiar domestic animals, part of the rural landscape surrounding the region in which this study took place, whereas, *tigers*, *lions, elephants* and *snakes* are wild animals commonly found in children's books, as well as in English textbooks for primary and secondary school EFL learners (Jiménez Catalán & Ojeda Alba, 2009). As shown by their presence in males' and females' top ten words, these words are undeniably part of their English lexicon; they reveal a mental landscape of typical pets, domestic and wild animals at the twelfth form level that is not particularly different from the one found in the sixth form for the same prompt in previous studies of lexical availability (Jiménez Catalán & Dewaele 2017).

Although the pattern of uniformity predominated in our results, we cannot overlook the differential tendencies revealed by some learners' word responses. For example, *policeman*, *fireman* and *police* were produced by males and females, but neither of the two groups retrieved *policewoman*

or *firewoman*. In addition, in the males' top responses, we noted exclusive vocabulary not found in the females' responses, such as *engineer* and *politician*; in contrast, *singer*, *musician* and *shop assistant* were exclusive to females. These responses suggest a gender-traditional conceptualisation of roles as, at least in Spain, *engineer* and *politician* are jobs more commonly fulfilled by men, whereas the role of *shop assistant* is more frequently fulfilled by women (Iglesias & Llorente, 2010; López-Sáez, Morales, & Lisbona, 2008). A similar pattern was observed in the prompt 'Clothes', as a high percentage of females retrieved typically associated with women such as *dress* and *skirt*. These words were not found in the males' top ten list. By contrast, *trousers, shirts* and *jackets*, items of clothing associated with men in the past, were found in the females' top ten list. The pattern revealed by males' and females' exclusive words suggests that the norm adopted by male and female EFL learners is the masculine rather than the feminine. This pattern is not different from the one reported in gender studies and sociolinguistics (Coates, 2004; Goddard & Patterson, 2000; Holmes, 1994).

As for the educational implications of the present study, it contributes to gender and foreign language education in three ways. Firstly, it reports the means obtained by male and female adolescent EFL learners in a lexical availability task, which may be used as an account of the English lexical performance of a large sample of Spanish EFL learners at the end of post-secondary education before entering university. Secondly, the present study suggests some improvement in male EFL learners regarding lexical availability output in the target language. This is good news, as previous research has systematically reported females having better performances. However, we need further research to see whether this emerging tendency stabilises. From an educational point of view, it is important to monitor the appearance of significant differences in favour of either of the sexes, as this may lead to inequalities in foreign languages; as a result, this may have consequences for learners' marks and prospective professional lives. Thirdly, to the best of our knowledge, this is the first study to provide the actual words that male and female adolescent EFL learners associate with prompts related to 'Professions', 'Clothes', and 'Animals'. Keeping the prompts and the course level constant (twelfth form), this first account could be useful as a framework for comparison. It could allow for the comparison of the lexical availability performance of male and female EFL learners with different first languages in various countries across the world.

Furthermore, the inclusion of a detailed analysis of all the words retrieved by male and female EFL learners in lexical availability tasks would expand research on gender and foreign language education considerably, as not only could the words male and female EFL learners associate with other words be identified, but their vocabulary knowledge in the target language could also be ascertained. This could be done by conducting further analyses of learners' lexical availability output to determine the frequency and the level of the words. Some preliminary studies have been conducted in this regard (López González, 2010), but they did not focus on the gender variable.

Acknowledgements

References

Agustín Llach, M.P. & Fernández Fontecha, A. (2014). Lexical variation in learners' responses to cue words: The effect of gender. In R. M. Jiménez Catalán (Ed.), *Lexical Availability in English and Spanish as a Second Language* (pp. 69-81). Dordrecht, Heidelberg, New York: Springer, Educational Linguistics. doi: 10.1007/978-94-007-7158-1_6

Agustín Llach, M.P. (2009). *Gender Differences in Vocabulary Acquisition in the Foreign Language in Primary Education: Evidence from Lexical Errors*. Logroño: Universidad de La Rioja. doi : 10.1057/9780230274938

Ardila, A., Ostrosky-Solís, F. & Bernal, B. (2006). Cognitive testing toward the future: The example of Semantic Verbal Fluency (ANIMALS). *International Journal of Psychology 41 (5)*, 324-332. doi: 10.1080/00207590500345542 [retrieved 02.05.2018]

Baumeister, A. (1985). Age of acquisition and meaningfulness as predictors of word availability. *The Journal of General Psychology* 112/ 1, 109-112.

Block, D. (2002). Language and gender and SLA. *Quaderns de Filologia. Estudis Lingüístics*, 7, 49-73.

Cameron, D. (2010). Sex/gender, language and the new biologism. *Applied Linguistics*, 31/2, 173-192. https://doi.org/10.1093/applin/amp022

Carr, J., & Pauwels, A. (2006). *Boys and Foreign Language Learning*. Basingstoke & New York: Palgrave Macmillan.

Chavez, M. (2001). *Gender in the Language Classroom.* Boston: McGraw Hill.

Chung, C., & Pennebaker, J. (2007). The Psychological Functions of Function words. In K. Fielder (Ed.), *Social Communication* (pp. 343-361). New York: Psychological Press.

Coates, J. (2004). *Women, Men and Language: A Sociolinguistic Account of Sex Differences in Language*. London and New York: Longman.

Davis, F. (1992). *Fashion, Culture, and Identity*. Chicago: The University of Chicago Press.

Ehrlich, S. (1997). Gender as social practice: Implications for second language acquisition. *SLA*, *19*, 421-446.

Elsner, D., & Lohe, V. (2016). (Eds.), *Gender and Language Learning: Research and Practice.* Tübingen: Narr Francke attempt Verlag.

Fernández Fontecha, A. (2010). Gender and Motivation in EFL Vocabulary Production. In Jiménez Catalán, R.M. (Ed), *Gender Perspectives on Vocabulary in Foreign and Second Languages* (pp. 93-116). Houndmills/ Basingstoke/Hampshire/New York: Palgrave Macmillan. doi: 10.1057/9780230274938

Goddard, A., & Patterson, L.M. (2000). Language *and Gender*. London: Routledge.

González Fernández, J. (2013). La disponibilidad léxica de los estudiantes turcos de español como lengua extranjera. *Marcoele Revista de Didáctica Español como lengua extranjera, 16*. http://marcoele.com/disponibilidadlexica-de-estudiantes-turcos/ [retrieved 28.05.2018]

Hell, J., & de Groot, A. (1998). Conceptual representation in bilingual memory: Effects of concreteness and cognate status in word association. *Bilingualism: Language and Cognition*, *1 (3)*, 193-211.

Holmes, J. (1994). *Women, Men and Politeness*. London: Longman.

Iglesias, C. & Llorente, R. (2010). Evolución reciente de la segregación laboral por género en España. *Revista Universitaria de las Ciencias del Trabajo*, *11*, 81-105.

Jiménez Catalán, R. M., & Dewaele, J.M. (2017). Lexical availability of young Spanish EFL learners: Emotion words versus non-emotion words. *Language, Culture and Curriculum*, *30 (3)*, 283–299. https://doi.org/10.10 80/07908318.2017.1327540

Jiménez Catalán, R.M. (2010) Gender Tendencies in EFL across Vocabulary Tests. In Jiménez Catalán, R.M. (Ed) *Gender Perspectives on Vocabulary in Foreign and Second Language* (pp. 117-137). Houndmills/Basingstoke/ Hampshire/New York: Palgrave Macmillan.

Jiménez Catalán, R.M., & Ojeda Alba, J. (2009) Girls' and Boys' lexical availability in English as a foreign language. *ITL International Journal of Applied Linguistics*, 158, 57-76. https://doi.org/10.2143/ITL.158.0.2046920

Jiménez Catalán, R.M., & Ojeda Alba, J. (2008). The English vocabulary of girls and boys: Similarities or Differences? Evidence from a corpus based study. In L. Litosseliti, H. Sauton, K. Harrington, & J. Sunderland (Eds), *Theoretical and Methodological Approaches to Gender and Language Study* (pp. 103-118). Houndmills/Basingstoke/Hampshire/New York: Palgrave Macmillan.

Jiménez Catalán, R. M. (2003). Sex differences in L2 vocabulary learning strategies. International. *Journal of Applied Linguistics*, 13, 54–77. https:// doi.org/10.1111/1473-4192.00037

Jule, A. (2010). A Case Study of Mrs Smith's Words and Her Quiet Girls. In Jiménez Catalán, R.M. (Ed) *Gender Perspectives on Vocabulary in Foreign and Second Language* (pp.167-187). Houndmills/Basingstoke/Hampshire/ New York: Palgrave Macmillan. doi: 10.1057/9780230274938

Jing, L. (2012). El estudio de la disponibilidad léxica de los estudiantes chinos de español como lengua extranjera", *Marcoele Revista de Didáctica Español como Lengua Extranjera*, 14, 1-14. https://marcoele.com/descargas/14/lin-disponibilidad_lexica.pdf [retrieved 22.05.2018]

Kaur, S. (2009). *A Corpus-Driven Contrastive Study of Girls' and Boys' Use of Vocabulary in their Writing in Malaysia and the United Kingdom*. A thesis

submitted for the Degree of Doctor or Philosophy, Department of Linguistics and English Language, Lancaster University.

López González, A. M. (2010). La evaluación del desarrollo de la competencia léxica en L2 por medio de la disponibilidad léxica. *redELE revista electrónica de didáctica / español lengua extranjera*, *18.* https://sede. educacion.gob.es/publiventa/descarga.action?f_codigo_agc=16839 [retrieved 05.05.5018]

López-Sáez, M., Morales, J.F., & Lisbona, A. (2008). Evolution of gender stereotypes in Spain: Traits and roles. *The Spanish Journal of Psychology*, *11 (2)*, 609-617. https://doi.org/10.1017/S1138741600004613

Martin, A., Wiggs C.L., Lalonde F. & Mack C. (1994). Word retrieval to letter and semantic cues: A double dissociation in normal subjects using interference tasks. *Neuropsychologia*, *32 (12)*, 1487 1494.

Mills, S. (2002). Rethinking politeness, impoliteness and gender identity. In L. Litosseliti, & J. Sunderland (Eds.), *Discourse Analysis and Gender Identity* (pp. 69-89). Amsterdam: John Benjamins.

Norton, B. & Pavlenko, A. (Eds.) (2004). *Gender and English Language Learners*. Alexandria, VA: TESOL Publications.

Pavlenko, A. (2004). Gender in foreign/second language education: Critical and feminist approaches to research and pedagogy. In B. Norton, & K. Toohey (Eds.), *Critical Pedagogy in Language Education* (pp. 53-71). Cambridge, MA: Cambridge University Press.

Pennebaker, J. W., Mehl, M.R., & Niederhoffer, K. G. (2003). Psychological aspects of natural language use: Our worlds, our selves. *Annual Review of Psychology*, *54*, https://doi.org/10.1146/annurev.psych.54.101601.145041

Samper Hernández, M. (2002). *Disponibilidad léxica en alumnos de español como lengua extranjera*. Málaga: ASELE.

Samper Hernández, M., & Jiménez Catalán, R. M. (2014). Researching lexical availability in a second language. In R. M. Jiménez Catalán (Ed.), *Lexical Availability in English and Spanish as a Second Language*. (pp. 189-205). Heidelberg: Springer. doi: 10.1007/978-94-007-7158-1_11

Sandu, B. (2012). La disponibilidad léxica en alumnos rumanos de ELE: incidencia de la variable 'sexo/género' y su correlación con el 'nivel escolar. *Lingua Americana*, *31*, 61-85.

Sunderland, J. (2000). Issues of language and gender in second and foreign language education. *Language Teaching*, *33 (4)*, 203-223. https://doi.org/10.1017/S0261444800015688