



Gender gaps in English as a second foreign language attainment: some Oujda High Schools case study

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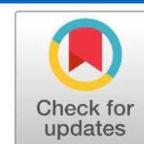
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Abstract: Several studies and research have been conducted on the issue of gender gap attainment, most of which have concluded that female students are relatively higher achievers compared to males. This gap is attributed to different explanations depending on the angles from which it is viewed, amongst which is the average use of language learning strategies (LLS). Therefore, the current study attempts to find out and analyze the reasons why female and male students perform differently in the English classes in Oujda high schools. It also aims to discover who exploits LLS more in learning English as a foreign language. To effectively reach this goal, the researchers use a self-developed observation checklist to identify who outperforms the other and a structured interview to discern who uses LLS more effectively. As a result, two points emerged in this research paper. The current study attempts to find out about female-male differences in English attainment. Besides, it seeks explanations for male and female performance in the English classes in Oujda high schools. It also aims to discover who exploits LLS more in learning English as a foreign language. To fill this gap, a number of 960 students were observed, and 32 students were interviewed. The study is approached using the mixed-method of quantitative and qualitative design, where a descriptive approach is used. Data is gathered through both instruments observation and interviews in five high schools. To effectively reach this goal, the researchers use a self-developed observation checklist to identify who outperforms the other and a structured interview to discern who uses LLS more effectively. As a result, two points emerged in this research paper. First, this research paper proves that females outperform males in English classes. Second, females use more learning strategies than males. The researchers infer from the results that there is an attainment gap, namely, male students underachieve females.

Keywords: attainment gap; sex differences; learning strategies; teaching styles; academic behaviour; secondary school students.

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INTRODUCTION

A growing number of studies and research have been conducted on the issue of the gender gap in scholastic attainment (Yenilmez, 2016; Hannum, et al., 2018; Reilly, 2018; Hdi & Fagroud, 2018; Benattabou, 2021); most of them have concluded that female students are relatively higher achievers compared to their peer males. Female students, according to Yenilmez (2016), are often found to smash male students in secondary and higher secondary education, a fact that is elucidated by Reilly (2019) and Benattabou et al. (2021). The former conducted a study to find out about sex attainment in reading and writing. He states that “girls generally exhibit better reading and writing ability than boys” (Reilly, 2019).

Along with these findings, Benattabou et al. (2021) carried out a study to conduct a further investigation of the relationship between sex and foreign language performance. The investigation took place in Zerktouni

high school in Beni Mellal directorate and studied the records from a sample of 153 students, of whom 75 are males, and 77 are females. The study finds out that the quantitative data pertaining to students' learning grades display a noticeable superiority among females as they are seen to outperform their male peers with regard to the three achievement tests and the general composite EFL score. In line with these findings, [Hdii & Fagroud \(2018\)](#) indicate, in a study conducted in the National Agriculture School of Meknes, those female students exceed their peer male students in almost all school subjects, including foreign languages such as French and English. The researchers studied students' grades from 2009 to 2015 to check if there was any possible difference in academic attainment between males and females. They state that "females nowadays not only outnumber male students but also get better grades in all the categories of subjects" ([Hdii & Fagroud, 2018](#)).

Although these researchers agree that females outperform males, this gap in attainment is attributed to different explanations depending on the angles from which they are viewed. Take, for example, good educational aspiration of parents ([Durden & Ellis, 1995](#)) and high aspiration to attend college, feminization of the teaching profession ([Bawden, 2007](#)), personal freedom and higher status ([Brown, et al., 2010](#)), migration ([Hannum, 2018](#); [North, 2019](#)), lack of social support and resources ([North, 2019](#)), poverty ([Reimer, 2012](#); [Dahmani, 2020](#)), among others, highly affect students' academic attainment.

Not only do these factors affect students' academic attainment, but different use of learning strategies does affect them as well ([Bialystok, 1985](#)) since learners have different cognitive abilities and aptitudes linked to the right or left hemispheres. However, [Sherwood \(2017\)](#) suggests moving away from those ideas since there is little evidence that neurological differences cause distinct abilities or manners of learning in boys or girls. Reilly, on the other hand, asserts that females use both hemispheres of the brain for reading and writing while males rely on just one ([Reilly, 2018](#)), which appears to be the leading factor in learning strategies differences.

The visit to some schools at the beginning of the year was a big chance to witness the frequency of students' participation and interaction in English classes. It was crystal clear -when observing colleagues delivering lessons- that the rate of participation was sometimes high and other times low, depending on the activities implemented by the teachers. By and large, the gap between males' and females' participation frequency drew our attention. So, this research was set out on the premise that males' and females' participation frequency is unequal. For this reason, our main objective in this study is not only to uncover the reasons behind having girls outperform boys academically but also to suggest actions that should be taken to reduce inequality in school attainment.

Based on what has been mentioned above, the hypothesis -females outperform males by virtue of using more learning strategies- is formulated to be proved or disproved at the end of the study. We opt for a mixed approach to collect data through which the following research questions are answered: Why do females outperform male students academically, and what actions should be taken to reduce inequality in academic

attainment? We rely on the observation grid and the interview; the observation grid helps us directly observe the participation frequency of students in the classrooms, while the interview helps us get more details about students learning strategies.

The scope of this paper is limited to finding out about the learning strategies used mainly by high attainers, which suggest plans to be implemented in the classroom. We undoubtedly were so careful in being objective during the observation sessions for filling in the Grids. However, no one says for sure that the way students act during our presence would be consistent. For sure, our presence would be a double-edged weapon in that some students may get encouraged, and the other ones get discouraged. Accordingly, the data we get is relative. Last, many other administrative circumstances prevent us from getting students' terms general scores census to get many credible data.

Unlike the numerous previous studies (Hdii & Fagroud, 2018; Dahmani, 2020; Benattabou et al., 2021) that dealt with gender differences at the level of performance only by trying to answer the question: 'who does better?', the present study sets out not only to find out about the gender performance differences in learning English as a foreign language, but it fundamentally seeks explanation behind gender differences in education along with uncovering the learning strategies used by a group of high school students in English classes. In addition, prior studies were carried out in the same cultural setting (one school), while this one is carried out in five cultural settings in an attempt to reach reliable and generalizable findings.

The study at hand is relevant to teachers of English as a foreign language and stakeholders. The findings are very important as they give a clear idea about students' learning strategies utilized in the learning process, which might be of great value for material designers to develop appropriate learning aids. It provides teachers of English with insights on learning strategies each gender uses most to develop relevant activities for the learners.

METHOD

Research Design

This research is approached using the mixed method of quantitative and qualitative design. The data gathering instruments used are an observation checklist and structured interviews. Specifically, we examined the teaching techniques that students react to more frequently and the learning strategies students use more to learn English. The research questions that guided this study were: 'Why do females outperform male students academically, and what actions should be taken to reduce inequality in academic attainment?'

Setting and Participants

Nine hundred sixty students were observed, and 32 were interviewed in five high schools (Elarbi El-Hosseini, Ibn El-Haythem, Elkadi Ibn El-Arabi (2), Charif El-Idrissi) in Oujda so that enough and in-depth data could be gathered to analyze for reliable and generalizable findings. Secondary (high) school in Morocco consists of three levels: common core, 1st year, and 2nd-year baccalaureate. We opted for the three levels to ensure that the gender attainment gap happens throughout the years of study in secondary school,

not only at a certain level. Respondents are both males and females in heterogeneous and mixed-ability classrooms.

Data Collection

On the one hand, learning and teaching styles and strategies that appear in current literature are used to design the classroom observation checklist to meet the objectives of our study. This self-made checklist contains four features of the general characteristics of teaching. Each feature includes at least three sub-characteristics covering the frequency of student participation, whether initiated or imposed. On the other hand, the questions we use in the interview are adapted from the Oxford Strategy Inventory for Language Learning, version 7 (Oxford, 1989). This version is for the student of English as a second or foreign language. It is a kind of questionnaire, but we adapted it as a structured interview to avoid misunderstanding on the students' part, thus avoiding unreliable and not generalizable data. It seems that asking students on the spot and getting answers is more practical than a questionnaire. It is the best fitting way as questions might be explained in Moroccan dialect in case a respondent does not grasp the meaning behind them. These tools were piloted on a group of 30 students before being administered and used.

To collect data, we visited five schools for classroom observation or interviewing students. We attended some teachers' lessons to fill in the observation checklists for observation. The same procedure is performed concerning the interview. Sometimes, students were selected to be interviewed immediately after the closed observation session. However, most of the time, other schools were visited to interview respondents. The questions being asked are sometimes translated into the Arabic language to make sure that students understand them.

Data Analysis

To understand the reason behind girls' higher attainment compared to boys, we began by determining the rate of classroom participation at which teaching technique. This effort was measured by counting the number of classroom participation and its nature, whether imposed or initiated. We used the naturalistic inquiry approach to analyze the gathered data classified under a set of themes (Table 1).

Table 1. Male-Female Observed Classroom Participation: Initiated and Imposed

The General Characteristics of Teaching	Students' participation			
	Initiated		Imposed	
Feature	Male	Female	Male	Female
Introduction & Presentation	168	204	28	36
Interaction Activities	2	2	0	0
Problem Solving Tasks	41	45	6	5
Quality Questioning behaviour	19	35	20	22

Interview questions are classified under two themes (1) socio-psychological behavior and (2) academic behavior. The former elaborates on students' affective filter after performing an academic behavior, and the latter includes academic behaviors that each gender used more both in and outside the classroom. Four

questions (1-3-5-7) are classified under socio-psychological behavior, and three questions (2-4-6) are classified under academic behavior.

If one scrutinizes students' responses, one will recognize that they are consistent since they give similar responses to questions 1, 3, 5, and 7, which all pertain to effective strategies. First, it can be deduced that students' responses are reliable and credible. The four questions are intentionally and logically connected in that a response to each question conditions the other three questions, or it may be said that it presupposes certain responses. Four questions are deliberately devoted among seven to the affective strategies students use because it is believed that the affective side of the learner is highly decisive in the students' performance. One question is paraphrased twice to ensure credibility on the students' part.

RESULTS AND DISCUSSION

Result

1. Teaching styles and techniques

After the data was classified and coded, we concluded that almost all students' participation is initiated, particularly when engaging them in warm-up activities at the beginning of the lesson (39% male and 47% female students). However, when the teacher appoints students to participate, 6% of male and 8% of female students answer the questions (Table 2). The activities being mostly administered are assessing and building on prior knowledge, engaging students in the exploration process, and allowing students to discover key ideas of the lesson individually.

Interaction activities such as working in groups, games, and simulations are almost never used in the classroom because the large groups (40 students and above) and large tables make the spaces crowded and challenging to manage. However, when discussing a topic, only a few students (2 males and two females' participants) volunteer to communicate their ideas since they lack the language ability and resort to using phrases or chunks only.

Table 2. The Frequency of Classroom Participation: Initiated and Imposed

The General Characteristics of Teaching	Students' participation frequency			
	Initiated		Imposed	
Feature	Male	Female	Male	Female
Introduction & Presentation	39 %	47 %	6 %	8 %
Interaction Activities	50 %	5 %	00 %	00 %
Problem Solving Tasks	42 %	47 %	6 %	5 %
Quality Questioning behaviour	20 %	21 %	36 %	23 %

More female (47 %) than male (42 %) students are on an initiative engaged in solving situational problems through brainstorming techniques and others. When dealing with problem-solving tasks, the teacher rarely calls (6% male and 5% female) students on to share their ideas to avoid threatening their affective filter.

Quality questioning behavior of the teacher suggests a difference in students' participation. When questions are clear, focused, and purposeful, students' involvement is higher (36% of females and 20% of males), mainly when the feedback from the teacher is relevant. On the contrary, 23% of females answer when called on, as opposed to 21% of male students.

2. Learning strategies

A quick examination of the interview data (see appendix) reveals that questions one, three, five, and seven are classified under the socio-psychological behavior theme, while questions two, four, and six are classified under the academic behavior theme.

Students' social and psychological behavior is generally affected by the classroom environment. Most students (91 % females and 69 % males) volunteer to answer questions raised in the classroom when they are confident that their answers are correct, but 31% of males whose English is not that good and think their answers might be wrong prefer not to take part compared to 9 % of females who are determined to be active in the classroom no matter how their answers might be. When their answers are wrong, 65 % of them depend on teachers to correct them compared to males (45 %), and they seem to be more sensitive to their mates' reactions, like being mocked. They don't rethink their answers, nor do they correct themselves, unlike males (30 %) who try to self-reflect on their wrong answers.

It took us unawares when we found out that more than half (55 %) of the male respondents are not affected by the wrong answer they give anyway, while a few of them feel shy and unhappy since their colleagues may mock them, and that brings their confidence down. A few others state that they feel ashamed or embarrassed since they do not pay attention in the classroom. As for the feelings that pervade females after giving wrong answers, we notice that they were more dependent on individual differences due to the discrepancy in their responses; some seem indifferent, while others get discouraged and disappointed. A few others, like boys, feel ashamed of themselves because they admitted not paying attention while the teacher explained. Unexpectedly, one exceptional female student embraces and accepts her errors, considering them as part of the learning process. Despite female students seem to be more sensitive to giving wrong answers, more than 70% of them don't hesitate to interact in class, yet males are reported to wait for the teacher's call, and a few of them take the initiative to answer.

Their learning strategies highly influence students' academic behavior. Unless students understand the teacher's talk, they (50%) ask for repetition and clarification, and the others (50%) make guesses in context, and a few of them rely on the teacher's gestures or check their dictionaries. As for females, 84% resort to asking the teacher for clarification and explanation, and some depend on the teacher's gestures to get the meaning or ask their mates for clarification. To recall English items being learned, the majority of males (83%) and females (75 %) rely on reviewing lessons after class as a strategy to remember the learned items. Both males and females depend, with the same rate (17%), on linking previously learned items in English or in other subjects with newly presented items.

Interestingly, 8% of females use new English words in sentences to remember them as opposed to a few males who translate the new items from Arabic into English by surfing the net or sometimes using dictionaries. It seems then that there is a slight difference in the use of memory strategies. What is more, males (76%) rely to a great extent on watching pieces of videos and films in English to improve their English as opposed to females who use different strategies, apart from watching films (50%), such as texting and chatting in English (33%) in addition to reading widely and extensively for pleasure (17%). Surprisingly a female student communicated that she improves her English by talking with native speakers when she has the opportunity either in person or online.

Discussion

A quick examination of the above findings reveals that females outperform males in classroom interaction and learning strategies. Females are active and reactive to the warming up and presentation activities, such as activating students' schemata, allowing them to discover key ideas individually, and assessing previously taught items. The findings are consistent with [Mutua & Oyoo \(2020\)](#), who investigated gender differences in learning strategies and academic achievement, where significant gender differences were positively reported. The study finds that girls endorse rehearsal and elaboration strategies more than boys. In another study, [Mahmud & Nur \(2018\)](#) studied the notion of gender differences in relation to learning strategies; however, no significant difference was reported, they found that the female students used cognitive, compensation, and affective strategy more often compared to their male peers.

Females surpass males in problem-solving activities when teachers employ brainstorming techniques to better engage students in solution finding. Applying problem-solving tasks produces different participation rates among students suggesting high involvement of females. This result matches with [Mahmud & Nur \(2018\)](#), where females use cognitive, compensation, and affective strategies more often compared to male students.

Though students are affected by teachers' questioning behavior, females keep surpassing males. The effect is positive if questions are clear, focused, and purposeful, in addition to positive feedback. For the latter, many teachers skip thinking of appropriate and motivating feedback, which sometimes affects students' academic behavior in class. The findings are in accord with [Reilly et al. \(2018\)](#). The study found that female students do better in class in reading and writing activities, where they tend to achieve higher grades during schooling. However, "boys tend to perform better than girls on standardized tests" [Reilly et al. \(2018\)](#). In addition, students, mostly females, initiate speaking by interacting with the teacher's talk and instructions only if they are not ambiguous, making them anxious and perplexed. Imposed questions also have great importance in increasing the rate of classroom participation, yet instructors rarely resort to this technique in order not to put learners under psychological pressure.

Students' academic behavior is the same in some places and different in others, where girls do better. Through interviewing students, we concluded that both types of gender use reviewing English lessons at

home as a strategy for learning English. A few of them state that they create a mental linkage with previous knowledge and other subjects. At this level, the results imply no difference in terms of memory strategies males and females use to master the English language. Similarly, [Mutua & Oyoo \(2020\)](#) reported no significant gender differences in organization learning strategies. Thus, the findings suggest “no significant gender differences between boys and girls in academic achievement” ([Mutua & Oyoo, 2020](#)).

Females, however, use texting in English, jotting down notes, and reading for pleasure as strategies for learning. What is more, to get the ideas communicated by the teacher, almost all the females resort to asking for clarification or repetition when they do not understand the elements of the lesson since the only way to make sure the communicated ideas are understood in the foreign language classes is to be elaborated by the teacher and confirmed by the students. On the other hand, males use watching English TV channels (films) as a strategy, mainly to enjoy themselves and not for the sake of learning. In addition, only half of the male’s resort to the same strategy females use when items are not grasped, and the other half rely on the guessing strategy. They guess the meaning of the idea to which they are not sure whether correct. They use cognitive techniques less.

Hence, females exploit their minds better by using their cognitive strategies. These three strategies they use, perhaps, contribute to creating a gap in terms of language attainment between both types of gender. What also makes the difference is how males behave when they don’t understand. No one can guarantee that only through making guesses can males understand everything. So, females understand and learn better by using compensation strategies effectively.

As for students’ social and psychological behavior, a third of male students prefer to keep silent the whole session when they give a wrong answer to a question. For males to be silent has many interpretations: first, they may lack the confidence to participate again. Second, they may be shy and fear confronting the class again with wrong answers since they lack self-esteem. Last, being unsure about the right answers pushes them to keep silent because they feel safe and secure. Some other male students correct themselves by reflecting on their answers. In addition, a great number of male as well as female respondents rely on the teacher’s correction and direction. Relying on the teacher’s correction guarantees that the learning taking place is correct and can be taken for granted.

Being less anxious gives more chances for females to learn English as a foreign language. Almost all of them would volunteer to respond to a question if they knew the answer, and only a few (8%) feel shy and are reluctant to answer the second time if they give a wrong answer. To put it differently, they feel ashamed not because of the wrong answer but because they were dissatisfied with themselves, in that they attributed these inconveniences in their performance to their lack of attention in the classroom. Females keep being active no matter their responses, and they are indifferent to their mates’ reactions if they come up with wrong answers.

Conversely, half of the males are disinclined to respond to questions and are passive in class; they feel shy and incapable of answering in English. Although some of them know the answer, they would not dare to

participate as their answers might be wrong. On this basis, females seem to be more audacious in taking risks and more responsible for their learning experience and determined to reach their goals than males.

CONCLUSION

The present study attempted to explore the explanations behind gender differences in English as foreign language attainment. It is found that there is a significant difference between female students and their male peers in classroom performance. It is also found that these differences are relevant to the learning strategies each gender uses during the learning process. As was observed in the data used, female students outnumber males in almost all learning strategies included, under academic behavior as well as social and psychological behavior, with the exception of memory strategies.

The findings, as mentioned above, suggest a couple of recommendations and implications minimize inequality in language attainment. First, students should be treated differently according to gender, for males are inclined towards silence due to shyness and lack of self-esteem, which hinder learning during the lesson's flow. Accordingly, males should be encouraged to take part in the lesson and voice out their opinions. Second, teachers should utilize games and activities that foster males' self-confidence and get rid of the boundaries that limit their participation. Third, thanks to the structured and unstructured observation process, we noticed a sort of unconscious bias on the part of some teachers in the sense that females are given more care and value than males. This may become a variable that affects the participation rate. Thus, teachers should be very careful in their general pedagogical behavior, like giving equal chances for males as well as females. Briefly, this study asserts that academic behavior is profoundly affected by socio-psychological behavior.

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