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EFL Reading Achievement: Impact of Gender and Self-efficacy Beliefs

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Abstract. Research has shown that reading is highly correlated with students' academic performance in other disciplines. However, students' reading attainment is influenced by many factors. The purpose of this study is two folds: Investigating the gender gap in English as a foreign language (EFL) reading achievement of male and female basic education students in grades four and ten; and also examining the relationship between these students' reading achievement and their reading self-efficacy beliefs. More specifically, it examined the differences in these beliefs in light of gender and grade level and the interaction between the two. The total sample consisted of 636 students, 260 grade four students and 376 grade ten students from basic education schools in the Sultanate of Oman.

Two research instruments were used in this study: national reading achievement tests obtained from the Ministry of Education and a reading self-efficacy beliefs scale developed by the researchers. Findings revealed that there were gender gaps in the EFL reading achievement in favor of females in both grades four and ten. Moreover, the findings showed that females in both grades held a superior level of reading self-efficacy beliefs for their EFL reading achievement than males did. Added to that, the findings showed that grade four students reading self-efficacy beliefs for EFL reading achievement was higher than those of grade ten. Finally, the findings showed a strong association between reading self-efficacy beliefs and the reading achievement of students in both grades; students with higher levels of self-efficacy beliefs for EFL reading tended to perform better in their reading achievement tests.

Key words: EFL Reading; Self-efficacy beliefs; Gender gap; Basic Education; Reading achievement.

Introduction

Success in school and in later life heavily relies on the individual's ability to read. Reading is an integral part of success in almost all academic areas as well as in obtaining a successful career in the future (Chapman, 2010). Reading is

also the agent by which different affairs are carried out and achieved in almost all work places. Hence, reading is considered as a crucial element for the enhancement of both the social and economic status of different nations (White, 2007). In Oman, educational authorities are exerting huge efforts to develop reading skills of the Omani youth, especially at school level in both the Arabic language and the English language, which is taught as a foreign language (EFL). Despite the educational efforts to promote reading attainments, boys' and girls' reading achievement levels differ significantly in favor of girls causing global concern of different policies (Watson, Kehler, & Martino, 2010). The discrepancies in the attainment of reading of the two genders are referred to in literature as "a gender gap in reading" and it has been described as a "universal problem" (Sadowski, 2010, p. 11). Gender gap in reading has been revealed by many international, national and local surveys and trends. Most of these evaluation trends for reading achievement have reported the advantage of girls over boys in reading attainment.

Many psychological, social, biological, affective and cognitive factors are found to impact the reading attainments of boys and girls (Robinson & Lubienski, 2011). Among these factors is the self-efficacy beliefs which are defined as "beliefs in one's capabilities to organize and execute the course of action required to produce given attainment" (Bandura, 1977, p. 3). In educational settings, self-efficacy beliefs are considered as an integral element in determining the achievement of students (Barnes, 2010). They play a vital role in predicting the actions students perform and the amount of motivation and efforts they would display when learning (Pajares, 2002). Thus, self-efficacy beliefs capture the attention of researchers to study them more intensively in relation to learning languages.

In Oman, the gender gap in the overall achievement favoring girls is present in different age groups and different content areas at all school levels including university level (Osman, Al-Barwani, Al-Mekhlafi, & Babikir, 2011). For example, at school level, grade eight Omani female students outscore boys' in math and science (International Study Center, 2007). Investigating literacy skills in some developing countries including Oman, Griffin (2000) examined the achievement in literacy for grade four Omani students and found that girls surpass boys, and that "the mastery levels favor girls by up to 6%." (p.9). Additionally, the Ministry of Education (MOE) national assessment results, where objective tests were used, showed that girls outscore boys in these assessments (MOE & The World Bank, 2012).

In the EFL context in Oman, gender gap is present among Omani students in favor of females. For example, Osman et al. (2011) found that Omani female students surpass their male counterparts in English language achievement at school level, and that the difference between the two is up to 10 points of the main score. Additionally, in the academic year 2008, a national English language test was given by the MOE in Oman to grade ten students. The results revealed an approximately (1.7) point difference in the mean results of the reading part between boys and girls favoring the girls. This difference was found to be significant (Ministry of Education, 2009b). Parallel to grade ten, in the academic year 2009, a national English language test was administered by the MOE to grade four students which showed that there was a significant

difference in the students' performance in reading in favor of girls (Ministry of Education, 2010c).These findings call for a serious investigation of the causes for such gender differences in this language skill.

The underachievement of male students in EFL in general and in reading skills in particular would have implications on the balance of the Omani society. It would affect males' enrollment in higher education institutes as well as their ability to meet the needs of the labor market. The high achievement of girls, on the other hand, increases their chances for better education opportunities in higher educational institutes and employment. Hence, there is a need for an investigation into the factors behind such a gender gap in reading (Osman, 2012).

Coladarci and Breton (1997) argue that students' reading attainment is not only influenced by their intellectual capacities, but also by non-cognitive abilities like self-efficacy beliefs. Bandura (1977) identifies self-efficacy beliefs to be the judgments people hold about their own abilities to carry out particular actions. Such beliefs have an impact on controlling people's performance and their functions by influencing people's "cognitive, motivational, affective, and decisional processes" (Bandura & Locke, 2003, p. 87). Self-efficacy beliefs decide how people conceive themselves regarding their capability or incapability to perform certain actions, how motivated they are to face the difficulties when doing certain tasks, what their emotional status is and what choices they make at a specific point of time (Bandura, 1977; Bandura & Locke, 2003; Shaw, 2008). In academic contexts, researchers state that self-efficacy beliefs give more consistent indications of the academic achievement of students than any other self-beliefs (Barnes, 2010; Pajares, 2003; Schunk, 2003; Shell, 1995).

In the domain of reading, reading self-efficacy beliefs are viewed as the judgment of how effectively an individual can perform in a certain reading task (Wigfield, Guthrie, Tonks, & Perencevich, 2004). Such judgment influences how well the individual can work in similar reading tasks (Ferrara, 2005). Thus, reading self-efficacy is considered as a predictor of reading achievement (Nevill, 2008). McCabe and Margolis (2001) indicate that when students have low self-efficacy beliefs for reading, they are likely to "resist reading or apathetically go through the motions of learning to read" (p.45). On the other hand, self- efficacy is considered as an essential provider to motivate students to work more diligently (Schunk, 2003). Moreover, students with high reading self-efficacy beliefs tend to read more frequently (Wigfield & Guthrie, 1997) and henceforth increase their reading fluency and achievement.

Purpose of the study

This study aims to examine the reading achievement of male and female students in grades four (end of cycle one) and ten (end of cycle two). It was also to examine the disparity in the levels of efficacy beliefs held in EFL reading achievement by both genders by the end of each cycle. More specifically, the study answered the following questions:

1. Are there any significant differences in reading achievement between Omani male and female students in grade *four*?
2. Are there any significant differences in reading achievement between Omani male and female students in grade *ten*?
3. Are there any significant differences in reading self-efficacy beliefs between Omani male and female students in grade *four*?
4. Are there any significant differences in reading self-efficacy beliefs between Omani male and female students in grade *ten*?
5. Are there any significant differences between the reading self-efficacy beliefs of Omani male and female students in grades four and ten?
6. Is there a relationship between male and female students' reading self-efficacy beliefs and their reading achievement in each grade level?

Theoretical back ground

Self-efficacy Beliefs and Gender

In different aspects of life, both genders seem to vary in their general self-efficacy beliefs. In academic contexts, Pajares (2002) looks at self-efficacy for academic achievement of both genders with relation to their self-regulation. He asserts that self-efficacy for the use of self-regulated learning strategies favored females over males; results showed that females utilize strategies like doing homework and setting goals more than males. Pajares (2002) also states that boys tend to report high self-efficacy beliefs for the skills they do not have and higher efficacy beliefs for skills they do possess, whereas girls are reported to be more "modest" about their efficacy beliefs as cited in Winfield, Eccles, & Pintrich (1996).

In language arts, studying the relationship between reading self-efficacy, reading enjoyment, and reading achievement of students aged 8 and 12 years old, Smith, Smith, Gilmore, and Jameson (2012) found that girls surpassed boys in reading achievement and reading enjoyment, however, gender disparity in self-efficacy were minimum. This supports the findings of Pajares and Valiante (1999) where girls were found to have more competence in writing than boys. There was, however, no significant difference found in the writing efficacy beliefs of both genders. According to these researchers, this suggests that male and female students use "different metrics" when they respond to efficacy scales (P. 390).

With a similar age-group of students to the above studies, Pecjak and Peklaj (2006) investigated the differences in motivational factors of grade three and seven students according to their gender and reading achievements. For the third graders, general self- efficacy, self-efficacy in oral reading, and interest in reading were factor analyzed. Results showed that female students have higher oral reading self-efficacy and interest in reading than males. As for seventh graders, the identified motivational dimensions were four: extrinsic motivation, involvement and immersion in reading, interest and reading in a social context, and self-efficacy. The factor analysis revealed statistical gender differences in all dimensions except efficacy beliefs where the differences were insignificant.

Reading Self-efficacy and Age

As individuals grow up, many of their affective elements, including self-efficacy beliefs, undergo many changes. A review of the literature on efficacy beliefs and age yields that self-efficacy beliefs go through developmental changes as individuals grow up (Hiebert, 1984; Paris & Oka, 1986; Schunk, 1991; Shell, 1995).

Reviewed literature, however, seems to suggest that young children may lack the ability to assess their self-efficacy beliefs. Weiner (1985) and Stipek (1993) argue that young children may have imprecise views about the causes of their ability and success. In other words, young children may have misconceptions about the causes of their success and the level of their abilities. Therefore, they may relate their success or failure to mistaken causes. Moreover, when they are asked to estimate their efficacy beliefs, young children may over estimate these beliefs. Paris & Oka (1986) and Stipek(1993) indicated that previous studies have also suggested that young children tend to overrate their efficacy beliefs. These researchers, however, indicate that as children grow up, they become capable of giving more accurate judgments about their abilities.

The aforementioned insights about general efficacy beliefs and achievement align with the literature's view on reading efficacy beliefs and age. Henk and Melnick (1995), for example, shed light on the relation between reading self-efficacy beliefs and age. They mention that the scale they developed is appropriate for intermediate levels but not for the primary grades because prior to grade four, students cannot attribute their achievement to proper causes (Henk & Melnick, 1995). This corresponds to the findings of Weiner (1985) and Stipek (1993). It could be argued, therefore, that there is sufficient comprehensive literature that suggests that young learners' lack the ability to precisely report their efficacy beliefs.

Shell, Colvin, and Bruning (1995) examine the grade level differences of fourth, seventh and tenth graders and their control-related beliefs with relation to students' beliefs and writing and reading achievement. To measure the beliefs of the students, the researchers used two subscales: one to measure the task beliefs and the other is to measure the skills beliefs. Results yield that as grade level increases, students' task efficacy beliefs for reading relates more to achievement in reading. Specifically, these beliefs increasingly predict reading comprehension skill as the grade level develops.

Self-Efficacy and Reading Achievement

Bandura (1993) states that to accomplish certain tasks, people do not merely need knowledge and skills. A good acknowledgement of one's self-efficacy is fundamental. This could possibly explain why learners who may possess similar knowledge and skills differ in their accomplishments in a domain like reading (NokhbehRousta & MirSaeed, 2012). These researchers maintain that the diversity in the level of self-efficacy beliefs held by learners for reading is contributing to making them differ in their usage of their skills and knowledge. Therefore, this explains why learners vary in their reading achievement.

Wiltgen (2011) explains that the learners' high self-efficacy beliefs in reading impacts positively on their efforts to attempt any reading tasks and their

persistence in achieving such tasks. Learners with a high level of confidence in their reading abilities are more likely to engage themselves to learn more and show more effort and determination to face reading challenges (Wiltgen, 2011). In difficult reading tasks, these learners modify their reading strategies and adapt more effective strategies, control their negative emotions like anxiety and stress, assess their reading achievement precisely and negotiate with teachers and peers (Li & Wang, 2010). Henk and Melnick (1995) point out that reading efficacy impacts the process of comprehending what is being read and the overall achievement in this skill.

The above conclusions are supported by a comprehensive literature. For instance, NokhbehRousta and MirSaeed (2012) posit that, perceived self-efficacy beliefs held for reading are closely associated with reading performance. Investigating related literature and data analysis from different countries, Smith et al. (2012) conclude that self-efficacy beliefs have a strong potential influence on reading achievement. Al Bereki and Al Mekhlafi (2015) also argue that linguistic performance of female students would most probably be better than male students of the same age. In fact, Shell, Bruning, & Murphy (1989) find that reading self-efficacy beliefs are a strong predictor for the reading achievement of students (as cited in Jones, Varberg, Manger, Eikeland, and Asbjørnsen, 2012). Clark (2012) concludes that early researchers recognize students' self-efficacy beliefs for reading to be a key element in their reading process, and hence, reading achievement. Because of this, Clark (2012) declares that examining the self-efficacy beliefs students hold towards reading helps educators understand this construct's influence on students' achievement. For the above reasons, Walker (2003) recommends that teachers assign students with reading activities that they can accomplish. This will result in motivating students to read more, reflecting positively on their overall reading attainment. Self-efficacy beliefs are seen to be a key in developing the learners intrinsic motivation for reading (Pecjak & Peklaj, 2006). Walker (2003) also explains that students with low self-efficacy beliefs for reading utilize a fewer strategies, acknowledging low self-esteem about their reading capability, and hence, they are very likely to stop trying when they face challenging tasks. In contrast, high self-efficacy belief is connected to more reading strategy usage and engagement which results in enhancing reading achievement (Chapman & Tunmer, 2003).

A review of self-efficacy beliefs and EFL reading does not reveal a comprehensive literature in non-western settings (Khajavi & Ketabi, 2011). Most of the previous empirical work on self-efficacy beliefs and reading was found in western contexts where English is taught as a first language (Coronado-Aliegro, 2006). There are, however, some elements in literature that pointed to a link between EFL reading and self-efficacy beliefs. For instance, Wong (2005) points out that having a high perception of self-efficacy for reading in a foreign language helps learners face language difficulties and achieve better in reading tests. Li and Wang (2010) assert that readers with high self-efficacy beliefs set goals, arrange their time, and use cognitive strategies like "making inferences, note-taking, elaboration, grouping, deduction, and transferring" (p.153). Thus, a plethora of research supports the significant role of reading efficacy beliefs in enhancing learners' reading achievement.

METHODOLOGY

Research Design and Data Analysis

This is a descriptive analytic study. It describes the EFL reading achievement of grades four and ten students and reveals the levels of self-efficacy beliefs that these students hold for their EFL reading achievement. It also analyzes the differences in these beliefs in light of gender and grade levels as well as the interactions between the two.

Population and Sample

The population of this study was basic education (BE) students in grades four and ten in the Sultanate of Oman in the academic year 2012/2013 from different governorates of the Sultanate. It is worth mentioning that grade four represents the end of cycle one of the BE. Cycle one students (age 6-10) attend mixed-gender schools which are taught by female teachers. Grade ten represents the end of cycle two (age 11-15) of the BE. Students in this grade, however, attend single-gender schools where female students are taught by female teachers and male students are taught by male teachers. The implementation of the study's instruments lasted for almost 6 weeks. It is necessary to mention that the schools involved in the study and the sample underwent some changes due to some circumstances in the schools like the students' absenteeism, the invalid returned questionnaire and other reasons. Hence, there were a total of 260 valid responses representing 125 males and 135 females from cycle one schools and a total of 376 representing 188 males and 188 females from cycle two schools. Thus constituting (87%, and 92%) of the initial samples of grade four and grade ten, respectively.

Research Tools

Two instruments were used in this study. The first was a set of reading achievement tests for grades four and ten BE. These are national tests in English language administered by the Omani Ministry of Education for both grade four and ten. For the purpose of this study, only the reading section of the test was administered. The reliability coefficient of the reading part of the test was 0.93 for grade four, 0.65 for grade ten (Ministry of Education, 2010c, 2009b).

The second instrument was the reading self-efficacy beliefs scale developed by the researchers based on a thorough review of relevant literature. It was used to determine the level of efficacy beliefs for reading held by grade four and ten students. The scale was piloted to a sample of 40 students from the target population. The internal consistency coefficient Cronbach's "alpha", was computed for the scale and found to be (0 .948). The scale was a seven-unit interval with the following unit classifications: (7-6) strong confidence in doing the task, (5-3) moderate confidence, and (2-1) weak confidence in executing the task. The scale also included five sub-scales with the following number of items in each sub-scale: Reading at the Level of Words (6 items), Reading at the Level of Sentences (7 items), Reading at the Level of Texts (8 items), Independent Reading (6 items), and Other Statements (6 items). Hence, the total number of items became 33 in the implemented scale.

Procedures

The two instruments were administered to the study sample in four basic education schools. The reading tests were simultaneously administered in the three selected classes in each school (40 minute duration). The tests were then marked by two teachers to ensure the reliability of the grades assigned. The reading self-efficacy scale was administered on the same day as the reading achievement tests. A single code was used for each student. The data gathered via these two instruments were then analyzed using various statistical treatments (e.g. descriptive statistics, t-test, correlations, and linear regression).

FINDINGS AND DISCUSSIONS

Question One

The first research question investigated gender disparity in the reading achievement of grade four students. To answer this question data was collected via the administered national reading test. Accordingly, comparative analysis was carried out using the independent sample t-test. Table (1) displays a summary of the independent sample t-test results.

Table (1)
Mean Differences, Standard Deviations and the T Value of the Reading Achievement Test of Grade Four Students

Students' Gender	N	**Mean	Std. Deviation	T	df	Sig. (2-tailed)
Female	135	8.56	3.97	2.76	258	.006*
Male	125	7.23	3.79			

Note. Std = Standard Deviation, t = T value and df = degree of freedom
* The mean difference is significant at .05 level
** Test total mark is 20

The results shown in Table (1) reveal a significant gender difference in the means of reading achievement of grade four students at 0.05 level of significance. This difference is in favor of females whose mean achievement is (8.56) compared to the male's mean achievement (7.23).

These findings correspond to the results reported by Forsthuber, Horvath, & Motiejunaite (2010) that indicate the outperformance of fourth grade girls over boys in reading achievement in their mother tongue. They also correspond to the findings of Griffin (2000) who points out that grade four Omani females surpass their male counterparts in their literacy skills. In addition, this finding is consistent with a national English language test administered by the Omani Ministry of Education (MOE) in 2009 to grade four students whose results showed a significant gender difference in favor of females (Ministry of Education, 2010c).

Question Two

The second research question investigated gender differences in reading achievement of grade ten students. To answer this question data were collected and treated with procedures similar to the ones done for grade four. Table (2) shows the results of the analysis of the independent sample t-test.

Table (2)
Mean differences, Standard Deviations and the T Value of the Reading Achievement Test of Grade Ten Students

Students' Gender	N	**Mean	Std. Deviation	t	df	Sig. (2-tailed)
Female	188	13.28	4.70	4.56	374	.000*
Male	188	11.12	4.48			

Note. Std = Standard Deviation, t = T value and df = degree of freedom
* The mean difference is significant at .05 level
** Test total mark is 24

Similar to the grade four results, Table (2) reveals a significant gender difference in the means of reading achievement of grade ten students with a t-value of (4.56) and a significant level of .000 ($P < .05$). This difference is in favor of females whose mean achievement is (13.28) which is almost two degrees higher than that of the males. Similar to grade four, a gender gap in the EFL reading achievement also exists among grade ten students in favor of girls.

Three PISA surveys carried out with 15 year old students (similar age to grade ten in Oman), found corresponding results to the findings of this study. Significant differences were found in reading achievement favoring girls within this age group (Forsthuber, Horvath, & Motiejunaite, 2010). In addition, in the academic year 2008, a national English language test was administered by the MOE in Oman to grade ten students showed results indicating approximately (1.7) point difference in the mean results of the reading part between boys and girls favoring the girls: boys' mean result was (46.79) whereas the girls' mean was (48.48). This difference was found to be significant (Ministry of Education, 2009b). Consistent with grade four, these results call for more attention to be given to reading in grade ten male students' classes.

Literature has provided many justifications that could explain the outperformance of females over males. For example, Osman, Al Barwani, and Al Mekhlafi, (2015) point out that the instructional environments which include school ambiance, readiness, aspiration, and study habits were found to contribute more substantially to the gender gap in academic performance. Also, Hunsader (2005) argues that males, socially, do not like to be seen caring about reading and that according to the Canadian Council on Learning (2009), boys view reading as a "feminine activity" (p. 5). Therefore, the low achievement of boys in grade four compared to girls could be attributed to their social and psychological views of reading. Such perceptions may negatively influence the achievement of boys.

In addition, Robinson and Lubienski (2011) state that girls are found to frequently read more than boys and that they are more attentive in reading

classes. In their demographic information part, grade four students were asked to reveal whether they have English books in their home library and 65.7% of the females reported the availability of English books in their home library whereas only 47.6% of the males indicated having books at home. This shows that females are more exposed to reading materials than males as they have reading materials at home. Hence, the differences in reading achievement could be attributed to the availability of English books at home which may reflect positively on girls' reading attainments.

A third explanation could be linked to the impact of affective factors like motivation and positive attitudes which are found to favor girls (Forsthuber, Horvath, & Motiejunaite, 2010). Therefore, it could be claimed that grade four females have higher motivation and a positive attitude towards reading which resulted in their superior reading achievement compared to grade four male students. According to Osman, Al Barwani, and Al Mekhlafi, (2015), it is evident most prominent gender gap in academic performance appears to be in reading, where female students not only demonstrate higher performance in reading but also enjoy reading more than their males counterparts.

In the demographic information section, grade ten females also reported greater access to reading materials. For instance, 92.5% of grade ten females reported having English books at their schools' Learning Resource Center compared to only 85.3% of the boys. A higher percentage of females reported the availability of English books (57.4%) and computers with internet access (81.4 %) at home compared to boys (36.7%) and (69.1%) respectively. It could be claimed that having such available reading resources contribute to the higher performance of grade ten females students.

The impact of affective factors like motivation and attitudes which are found to favor girls could be a third explanation for the underachievement of grade ten males compared to females. These factors are also mentioned by Forsthuber, Horvath, & Motiejunaite (2010) as a possible justification for gender differences in reading. Another important affective factor is self- efficacy beliefs, which may explain the gender gap in reading achievement. This will be examined in the fourth question.

Questions Three and Four

The third and fourth research questions examined gender differences at the level of the reading self-efficacy beliefs of grades four and ten students respectively. These two questions were answered using the reading self-efficacy beliefs scale. Table (3) displays a summary of the independent sample t-test results of male and female students' reading self-efficacy beliefs in grades four and ten.

Table (3)
Mean differences, Standard Deviations and the T Values of the Reading Self-efficacy Beliefs of Male and Female Students in Grades Four & Ten

Grade	Students' Gender	N	**Mean	Std. Deviation	t	df	Sig. (2-tailed)
Four	Female	135	4.44	1.34	5.10	258	.000*
	Male	125	3.56	1.43			

Ten	Female	188	4.09	1.39	4.61	374	.000*
	Male	188	3.39	1.56			

Note. Std = Standard Deviation, t = T value and df = degree of freedom
* The mean difference is significant at .05 level
** The Reading Self-efficacy Beliefs Scale is a seven-unit Interval

Examining the gender differences in grade *four* self-efficacy beliefs as shown in Table (3), it is clear that the mean of the females' efficacy beliefs is higher than the males' by an approximately one unit difference in the means between the two. The means t-value (5.1) indicates a significant gender difference at $p < .05$. This difference is in favor of females. Thus, indicating that grade four females hold a superior level of efficacy beliefs for EFL reading achievement than males.

Additionally, the results also reveal that the means of the efficacy beliefs scores of both genders range from (4.44) points for the females to (3.56) points for the males. On the seven –unit scale used to measure efficacy beliefs, this range corresponds to the moderate category. Hence, grade four students' efficacy beliefs are at the moderate level.

Regardless of the statistical gender difference which favored females, both genders' efficacy beliefs for EFL reading are moderate. In other words, on average, grade four male and female students believe that they could basically perform the EFL reading tasks. The moderate level of self-efficacy may be attributed to the fact that reading self-efficacy beliefs are not incorporated in the EFL reading instruction. Thus, there may be no sufficient attention given to developing grade four self-efficacy beliefs for EFL reading. Another reason that may account for the moderate level of reading self-efficacy beliefs is that teachers and parents may not have solid background information about the sources of these beliefs and their role in enhancing students' achievement. Hence, they may neglect developing such beliefs within their children.

The results of the grade *ten* analysis displayed in Table (3) demonstrate a significant gender difference in reading self-efficacy beliefs favoring females with a *t* value of (4.61) an at $p < .05$ level of significance. This indicates that grade ten females have a higher level of reading self-efficacy beliefs than their male counterparts.

The means of the self-efficacy beliefs are (4.09) for females and (3.39) for males. These results fit in the moderate category in the seven –unit scale that was used to measure self-efficacy beliefs. Similar to grade four, the self-efficacy beliefs for EFL reading of both male and female students are at a moderate level irrespective of the statistical gender difference that favored females. Therefore, grade ten male and female students, on average, believe that they could basically perform EFL reading tasks. Similar reasons given for the moderate level of grade four self-efficacy beliefs could explain the moderate level of EFL reading efficacy for grade ten.

In the context of teaching English as a first language reading, and examining gender differences in reading self-efficacy beliefs, similar and contradicting results to the findings of these two questions were yielded by studies carried out with similar age group learners to the current study sample. For instance, Pecjak and Peklaj (2006) carried out a study to investigate reading

efficacy beliefs and reading achievement with grades three and seven where gender was one of the variables. Grade three results analysis coincide with the findings of these two research questions; Pecjak and Peklaj (2006) found significant differences in the level of efficacy beliefs in favor of females. With grade seven, however, these researchers found gender differences in reading efficacy beliefs to be insignificant which contradicts the findings of the two questions of our present study.

Additionally, another study, which supports the findings of these two research questions, was conducted by Lynch (2002) in Canada where females were reported to score a significantly higher level of reading efficacy beliefs compared to males among eight and nine- year- old learners. However, the study carried out by Smith, Smith, Gilmore, and Jameson (2012) found that the gender differences in reading self-efficacy are minimal among 8 and 12- year - old students.

Examining explanations for the higher level of reading efficacy beliefs among female students of the current study, the researchers first link it to sources of efficacy beliefs. Wood and Bandura (1989) state that mastery experiences are a vital construct of efficacy beliefs. Barnes (2010) and Usher and Pajares (2008) clarify that success in accomplishing tasks leads to building higher level of efficacy beliefs. The results obtained by analyzing the first and second research questions of this study, indicate that in both grades, four and ten females surpassed males in reading achievement.

Another justification could be related to the second construct for efficacy beliefs proposed by Wood and Bandura (1989) which is vicarious experiences. When students observe their peers underperform in a certain task, they are more likely to have less confidence in their abilities (Templin, 2011). As evidenced from the results of the research questions one and two, which show the underachievement of boys in reading tests compared to females, it could be argued that boys may have observed each other underperform in some reading tasks.

Another explanation could relate to Pajares (2002) argument that parents and teachers may transfer to the students the notion that the language arts are a feminine field causing girls to show higher self-efficacy beliefs for language learning, in this case reading. Furthermore, Schunk and Meece (2006) maintain that families with more educational resources are more likely to develop their children's efficacy beliefs. In their demographic information, which is one part of the efficacy scale, females reported higher percentages of resources availability than males did. Hence, it could be claimed that compared to males, females have more educational resources that enhance their EFL efficacy beliefs.

Questions Five

The fifth research question investigated the differences in the level of reading self-efficacy beliefs against gender and grade level (i.e. 5. Are there any significant differences between reading self-efficacy beliefs of male and female students in grades ten and four?). The data collected for this question was analyzed statistically using the independent sample t-test. Table (4) shows a summary of the obtained results of this test.

Table (4)
Mean difference, Standard Deviations and the T Value of Reading Self-efficacy Beliefs of Grades Four and Ten Students

Students' Grade	N	**Mean	Std. Deviation	t	df	Sig. (2-tailed)
Four	260	4.01	1.45	2.22	634	.027*
Ten	376	3.75	1.51			

Note. Std = Standard Deviation, t = T value and df = degree of freedom
* The mean difference is significant at .05 level
** The Reading Self-efficacy Beliefs Scale is a seven-unit Interval

Table (4) shows the mean of the reading self-efficacy beliefs for grade four students at (4.01), whereas the mean of reading efficacy beliefs for grade ten at (3.75). The difference in the means is statistically significant with a *t* value of (2.22) and a significant level of .027 ($p < .05$). This difference is in favor of grade four students. Thus, grade four students' level of self-efficacy for their EFL reading achievement is higher than that of grade ten students.

Smith, Smith, Gilmore, and Jameson (2012), Paris and Oka (1986) and Stipek (1993) point out that, in general terms, younger learners show stronger reading efficacy beliefs than older ones. Moreover, they mention that as learners got older, their efficacy beliefs deteriorate over the school years. This deterioration is exhibited more remarkably among adolescents than younger learners (Smith et al., 2012). These arguments coincide with the results of this question. Grade four students reported high efficacy beliefs. The older learners in grade ten, however, report lower level of efficacy beliefs for the EFL reading when compared to grade 4 students' EFL reading efficacy beliefs.

Grade four students' higher level of efficacy beliefs compared to those of grade ten could be explained by linking these findings to what literature postulates about the sources of efficacy beliefs. To start with, grade ten students have undergone more experiences with EFL tasks than grade four students. It could be argued that throughout these experiences, particularly reading tests and requirements, grade ten students may have encountered many incidents of failure. Therefore, their efficacy beliefs may have declined because of such experiences.

Question Six

The sixth research question investigated the relationship between reading achievement and students' efficacy beliefs in both grades. Thus, it was treated statistically using Pearson Product- Moment Correlation in a two-fold process as following:

- Correlation between grade *four* students' reading self-efficacy beliefs and their reading achievement.
- Correlation between grade *ten* students' reading self-efficacy beliefs and their reading achievement.

Table (5) depicts the obtained results.

Table (5)
Pearson Correlation of Grades Four and Ten Students' Reading Achievement and Reading Self-efficacy Beliefs

Correlated Variables	Grade	N	Pearson Correlation	Sig. (2-tailed)
Reading Achievement and Reading Self-efficacy Beliefs	Four	260	.541	.000**
	Ten	376	.518	.000**

**Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation, reveals that the Pearson r values are (.541 and .518) for grades four and ten respectively. This value is statistically significant at the level of .000 ($r < .05$) suggesting that there is a positive relationship between reading self-efficacy beliefs and the reading achievement of students in both grades. In other words, students with a higher level of efficacy beliefs tend to achieve better in reading. A significant volume of literature in reading English as a first language (e.g.Henk & Melnick, 1995; Wiltgen, 2011) and EFL settings (e.g.Li & Wang, 2010) has suggested that highly efficacious readers adopt many strategies when dealing with reading tasks. For instance, they set goals, arrange their time, and use cognitive strategies like "making inferences, note-taking, elaboration, grouping, deduction, and transferring" (Li & Wang, 2010, p. 153). Moreover, they show more effort and determination to face reading challenges (Wiltgen, 2011). These strategies enhance students' attainments in reading.

From the above discussion, justifications for the correlation between grade four and ten efficacy beliefs and their reading achievement can be adopted. It could be argued that grade four and ten students' efficacy beliefs for reading achievement seem to help them set and monitor reading goals, use different strategies, and display effort and determination to face reading challenges.

To further investigate the impact of reading efficacy beliefs on reading achievement, another statistical analysis was carried out. Controlling the effects of gender, a linear regression analysis was conducted to find out how much variance in students' reading achievement can be explained by their reading self-efficacy beliefs.

Examining the influence of self-efficacy beliefs as a predictor of reading achievement, Table (6) illustrates regression between efficacy beliefs and reading achievement as significant with a Beta value of (.54) and *t* value of (9.79) level at .000 ($p < .05$). This confirms that efficacy beliefs are predictors of reading achievement when gender is controlled. With the R^2 valued at (.29), these beliefs predict approximately 29% of the total variance in reading achievement. In other words, regardless of the gender of these students, almost 29% of the difference in reading achievement of grade four students is attributed to their reading self-efficacy beliefs.

Table (6)
Grade Four Linear Regression Analysis of Reading Efficacy Beliefs on Reading Achievement

Model Summary

Model	R	R Square	Adjusted R Square
1	.169[a]	.029	.025
2	.541[b]	.292	.287

a. Predictors: (Constant), student gender
b. Predictors: (Constant), student gender, self-efficacy beliefs

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7.23	.35		20.78	.000
	student gender	1.33	.48	.169	2.76	.006
2	(Constant)	2.02	.61		3.32	.001
	student gender	.05	.43	.006	.11	.915
	self-efficacy beliefs	1.46	.15	.539	9.79	.000

a. Dependent Variable: reading test result

Carrying out a similar analysis for grade ten students highlighted how much of the difference in the reading achievement of students in grade ten is attributed to self-efficacy. Table (7) shows the Model Summary and Coefficient of the linear regression analysis of this grade. The results in this table indicate that the R^2 value is (.28). The regression between efficacy beliefs and reading achievement is significant with a *Beta* value of (.49) and *t* value of (10.88) leveled at .000 ($p < .05$). This reveals that efficacy beliefs are predictors for reading achievement when gender is controlled. With the R^2 valued at (.28), these beliefs predict approximately 28 % of the total variance of the reading achievement. In other words, irrespective of the gender of these students, almost 28% of the difference in reading achievement of grade ten students is attributed to their reading self-efficacy beliefs.

Table (7)
Grade Ten Linear Regression Analysis of Reading Efficacy Beliefs on Reading Achievement

Model Summary

Model	R	R Square	Adjusted R Square
1	.229[a]	.053	.050
2	.530[b]	.281	.277

a. Predictors: (Constant), student gender
b. Predictors: (Constant), student gender, self-efficacy beliefs

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.12	.34		33.19	.000
	student gender	2.16	.47	.229	4.56	.000
2	(Constant)	5.92	.56		10.57	.000
	student gender	1.09	.43	.115	2.56	.011
	self-efficacy beliefs	1.53	.14	.491	10.88	.000

a. Dependent Variable: reading test result

The results in tables 6 and 7 illustrate that self-efficacy beliefs is a strong indicator of the EFL reading achievement of students in grades ten and four explaining 29 and 28% of the variance in both grades, respectively. These results are in line with previous studies carried out in L1 context. For example, Nevill (2008) finds that (21.5%) of the total difference in the reading achievement of his sample is attributable to the efficacy beliefs held by the learners. This highlights the importance of incorporating these beliefs in EFL reading instruction.

Conclusion

The findings revealed gender gaps in EFL reading achievement in favor of girls in both grades four and ten. In congruence with previous research, the findings of this study illustrated that younger learners show stronger reading efficacy beliefs than older ones. The findings indicated that grade four have superior level of self-efficacy beliefs for EFL reading achievement than grade ten students, and consequently grade four demonstrated higher level of reading achievement. Likewise, due to possessing higher level of self-efficacy beliefs for EFL reading achievement, female students demonstrated higher level of reading achievement. This suggests that there is a strong relationship between the level of self-efficacy beliefs and EFL reading achievement. Thus, it can be generally concluded that irrespective of students' gender and their grade level, there seems to be a causal relationship between self-efficacy beliefs students performance. Accordingly, special attention should be paid to developing students' levels of self-efficacy in higher grade levels in general, and for all male students in particular.

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