

READABILITY OF THE SECOND GRADE ARABIC LANGUAGE BOOKS IN THE UNITED ARAB EMIRATES

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Abstract

Purpose of the study: This study aims to measure the readability of Second Grade Arabic Language books in the United Arab Emirates (UAE).

Methodology: This paper discusses a quantitative survey conducted, based on previous studies which include Momni and Momni (2011), Nasser and Ibrahim (2013) and Lami and Zoaeni (2014), to examine readability problems in Arabic language books used in UAE schools. The researchers developed a Cloze Test and performed the test on a randomly selected sample of 387 Second Grade students. Both descriptive and inferential statistics (T-Test, ANOVA) were analysed using SPSS version 22 and to examine the readability of Second Grade Arabic Language books.

Main Findings: The result indicates that the students' average score in all the readability levels to the total score of the Cloze Test is at an unsatisfactory level. There are significant differences in the level of the poetic and prose texts' readability among the genders and different academic averages.

Applications of this study: This study provides evidence that the long-term goal of the Abu Dhabi Educational Council (ADEC) has yet to be achieved. The outcomes suggest that there is a need to improve students' readability of Arabic Language books in the UAE, starting from the Second Grade.

Novelty/Originality of this study: Readability of Arabic Language Book was widely explained by other researchers, but there is no study conducted on Second Grade students in UAE.

Keywords: *Readability, Arabic Language Books, United Arab Emirates, Curriculum, Instruction.*

INTRODUCTION

In June 2009, the Abu Dhabi Educational Council (ADEC) introduced a 10-year plan that serves as a long-term reform strategy for K-12 public schools. The short-term focus of the plan seeks to improve the capacity of principals and teachers, student achievement, discipline and attendance, and assessment techniques. Consequently, the long-term focus of the plan is to boost the overall quality of the education system. The Abu Dhabi School Model (ADSM) is one of the major reforms that fall under The 10 Years Plan known as the New School Model (Pennington, 2015). ADSM subjects are taught in either Arabic or English languages or both (ADEC, 2014). The Arabic medium curriculum in Abu Dhabi encompasses subjects such as Arabic Language, Islamic Education, Social Studies, Civics, Integrated Social Studies, Art, Music, Health, Physical Education, and Mathematics. Instead of rote memorization, the ADSM curriculum emphasizes critical thinking and problem-solving skills. According to Gallagher (2019), 105,665 Grade Three to Twelve students from private and public schools in Abu Dhabi, Al Ain, and Gharbiyyah took the "The Abu Dhabi External Measurement of Student Achievement" (EMSA). The EMSA program has been designed to provide data on students' achievement in Languages, Science, and Mathematics to relevant stakeholders. However, the results of Arabic Reading did not show the expected rate of growth that is at par with the later years of schooling. Therefore, it is necessary to identify the issue which may have caused Arabic Language reading problems. Reading is an essential life knowledge and it is one of the basic skills that the language curricula strive to develop among students during the duration of their study. Because of its crucial role in increasing students' access to information and knowledge while enriching their experiences, it is important to understand students' weaknesses and investigate problems that affect their academic performance (Miqdadi and Zoubi, 2004).

Educators give special attention to the process of reviewing, developing, and evaluating textbooks continuously. Several studies have evaluated textbooks in various stages according to the proficiency level of the target readers, where the linguistic characteristics of the book are compared with the characteristics of the learners (Taha Thomure, 2019).

According to Begeny and Greene (2014), readability is a result of the interaction of a group of factors, such as vocabulary and sentence complexity, that make the text more or less difficult to read. The concept of readability, according to Momni and Momni (2011), indicates the ease or difficulty of readable material. Thus readability is considered as one of the criteria and methods that are useful in developing textbooks and identifying their difficulty. According to Klare (1988), readability makes learning more productive and prevents students from despair and frustration that may result from their poor understanding of the material and lack of achievement. In addition to a positive relationship between a book's readability and student achievement, the importance of this study is that the results may contribute to increased understanding of the readability of the textbooks for the persons in charge of

developing curricula in the Ministry of Education. This will help guide the necessary steps in improving the quality of textbooks and in making recommendations for some texts that are not appropriate for the level of the students.

LITERATURE REVIEW

[Khalaf \(2015\)](#) argued that textbooks are one of the pillars in the educational process and serve as the first reference for both the teachers and the students. Thus, any selected textbook must be appropriate for the students' level of learning. [Bani Saab \(2009\)](#) indicates that it is necessary to use the textbook that is readable and has content that is easy to codify and understand. Therefore, educators should give special attention to the continuous process of reviewing, developing, and evaluating the textbooks. One aspect that is of interest to researchers is to compare the linguistic characteristics of a book with the characteristics of the learners using the book. According to [Momni and Momni \(2011\)](#), concord must be established between the reader and the book.

On the other hand, [Raqab and Naqa \(2017\)](#) suggested that the learner will not be able to understand the content unless he or she has reading skills, as the reading process requires a set of mental processes such as remembering, understanding, connecting, balancing, devising, organizing, and innovating. It is also a constructive process that depends on the student's previous experiences and the integration that occurs when building and accumulating experiences. It also requires the reader to interact with the meanings positively and understand the ideas inherent in the text. Accordingly, reading develops the reader's ability to distinguish the main ideas in the text, learn about their purpose, and summarise them in the reader's style and language. Reading also helps readers to understand the writer's point of view and vision. [Bassiouny \(2002\)](#) pointed out that there is a difference between readability and reading ability. Reading ability refers to a student's ability to read while readability indicates the ease or difficulty of the book, as well as being synonymous with the ability to understand. According to [Tayma \(2004\)](#), readability is the determination of the level of ease or difficulty of the text. Similarly, [Sayed \(2017\)](#) argued that there are many reasons behind the students' weakness in reading, including reasons related to the readable materials, such as being inappropriate to the level of students, vague or difficult to understand, having the topics are arranged in ways that are logically and psychologically beyond the student's level of maturity, and not being able to meet the student's interests, needs, and requirements.

[Aayid and Ahmed \(2008\)](#) claimed that students' weakness in the Arabic language, including reading skills, in Abu Dhabi schools is a cause for concern. A report issued by the Human Development and Knowledge Entity ([Salama & Malaa, 2014](#)) found that the total percentage of school achievement in the Arabic subject in most Dubai schools falls below the expected average in total achievement. Although [The Ministry of Education of the UEA \(2010\)](#) has validated the curriculum's appropriateness in terms of the learners' characteristics at each educational stage, many parents and teachers complained about the content's difficulty and its inappropriateness to the students' capabilities ([Ridge et al., 2017](#)). In this regard, there is a need for a readability assessment regarding the textbooks in the UAE. Hence, the present study investigated the readability of the Second Grade Arabic Language textbook, which was recently developed by the Education Ministry. A readability assessment can help determine the textbook's level of readability and its appropriateness for the students. Therefore, this study aimed to measure the readability of the Second Grade Arabic language book used in the UAE.

THE OBJECTIVES OF THE STUDY

This study sought to meet the two following objectives:

1. To study the readability level of the poetic and prose texts in the Second Grade Arabic book.
2. To study the statistically significant differences in the readability of the Arabic book in terms of the following variables: student's gender and academic achievement.

The hypotheses of the study

H1: There are no statistically significant differences at the level of the poetic and prose texts' readability in terms of the gender variable (male, female).

H2: There are no significant statistical differences between the students' score average in the level of the readability of the poetic and prose texts in the Arabic language book according to the academic average (low, medium, and good).

METHODOLOGY

A. Participants

The population of the study was the Second Grade students in Abu Dhabi schools during the 2017/2018 academic session. According to the Central Bureau of Statistics (Knowledge and Teaching Department), 31,975 students were studying at 441 schools, 250 being public schools while the remaining 191 are private schools. Eight schools were chosen through the random sampling method. The sample size selected for this study was 387 students. The number of literary texts in the Second Grade Arabic Language book used was nine, six of them were proeses and three were poetry. The researcher chose four literary texts to represent the Cloze Test, which equals 44.4% of the total literary texts. The profiles of the respondents, according to the demographic characteristics, are displayed in Table 1.

Table 1: Profiles of Respondents according to Demographic Characteristics (N=387)

Variables	Characteristics	Frequency	Per cent (%)
Gender	Male	195	50.39
	Female	192	49.61
Academic average	Low	118	30.50
	Medium	144	37.20
	Good	125	32.30

The gender of participants comprised 50.39% male and 49.61% female. The participants with medium academic average were 37.20%, good academic average at 32.30%, and low academic average at 30.50%.

Instrument

This study was based on a set of previous studies that have investigated the readability problem, including [Momni and Momni \(2011\)](#) and [Nasser and Ibrahim \(2013\)](#). Using randomly chosen text samples of the Arabic book, the researcher developed a Cloze Test as it is one of the most accurate methods in measuring the Arabic text's readability ([Rashid, 2009](#)). In the Cloze Test, the students are provided with a text that has some of its words omitted according to a certain manner. The student is then instructed to fill in the omitted words. If the omitted words are filled incorrectly, the student is given the full mark ([Tayma & Manaa, 2001](#)). In this study, the researcher omitted every seventh word of each text, whether it is a noun, verb, or letter, and replaced it with a blank space for the student to answer. The total omission in the literary texts was 30 which consisted of 20 omissions in the prose texts and 10 omissions in the poetic texts. The average omission was 10 in each prose text and 20 in each poetic text.

B. Test Validity

The researcher presented its first form of the test to a group of specialist arbitrators in curricula, teaching methods, measurement, evaluation, and the Arabic language to verify the test's content validity. Some of the arbitrators suggested numbering the blank spaces to facilitate the scoring process. The researcher applied the suggestion and ran the test on a pilot sample of 35 students. The researchers then adopted the test-retest method to verify the test's accuracy, the clarity of its instructions, the suitable timing, and analysis of the items.

Table 2: Pearson's Correlation Coefficients between The Cloze Tests' scores in the two tests

Text type	Text number	The correlation factor	The significant value	Text type	Text number	The correlation factor	The significant value
Prose text	1	0.84**	0.00	Poetic text	1	0.89**	0.00
	2	0.90**	0.00		2	0.80**	0.00
The two prose texts		0.87**	0.00	The two poetic texts		0.86**	0.00
The total score of The Cloze Test						0.88**	0.00

(**) = statistically significant at the level of indication (0.01).

All the correlations are high and statistically significant at the level of indication of 0.01.

The results refer to stability and constancy at the students' performance in The Cloze Tests of both parties in different applications.

Data analysis

Analysis of data was done using SPSS version 22. Both descriptive and inferential statistics were used to analyze the data and to examine the readability of Second Grade Arabic language books. The researcher performed the Cloze Test with 30 blank spaces and scored the test by granting students one mark for a correct answer and zero marks for an incorrect answer. The researcher also classified the students' performance in the readability into three levels which are the independent level, the academic level, and the unsatisfactory level, as shown in Table 2. The research questions were initially analyzed using descriptive statistics to determine the percentage of readability level. Inferential statistics analyses T-test and ANOVA were conducted to confirm the gender and academic average's (low, medium, and good) influence on the readability level.

Table 3: The criteria of classifying the students' readability levels according to the score of the Cloze Test

The readability level	The percentage of the testers' scores
The independent readability level	61% and more
The academic readability level	60% - 41%
The unsatisfactory readability level	40% and less

RESULTS

A. The readability level of the poetic and prose texts in the Second Grade Arabic Language book

The readability level of the poetic and prose texts in the Second Grade's Arabic book can be identified from the distribution of the sample's scores through three readability levels: the independent level, the academic level, and the unsatisfactory level. To ascertain the readability level, the researcher converted the students' scores in the poetic text, the prose test, and the total score into percentages. Table 3 shows the mean and the percentages calculated to arrange the scores according to their corresponding level.

Table 4: The iterations, the arithmetic mean and the percentages of the distribution of the individual student readability's level in the poetic, prose, and literary texts of the Cloze Test and the total score

Research areas	Readability levels	The iterations	The arithmetic mean	percentage
Prose texts	Independent	109	63.23	28.16%
	Academic	145	18.13	37.46%
	Unsatisfactory	133	41.10	34.36%
	Total	387	40.82	100%
Poetic texts	Independent	43	61.21	11.11%
	Academic	149	40.14	38.50%
	Unsatisfactory	195	13.42	50.38%
	Total	387	38.25	100%
Total score	Independent	76	62.22	19.63%
	Academic	141	40.62	36.43%
	Unsatisfactory	170	15.77	43.92%
	Total	387	39.53	100%

76 students filled in all the blank spaces in the readability test correctly, which is equal to 19.63% of the sample. These are the students at the independent level, where they can read and understand the Second Grade Arabic Language book without their teacher's help or supervision. The number of students in the academic level was 141, which is equal to 36.43% of the total sample. The students at this level need help from teachers to understand what they read. The number of students at the unsatisfactory level was 170, which is equal to 43.92% of the total sample. At this level, the students are unable to read or understand the Arabic language book even with the help or supervision of their teachers. The students' average score in all the readability levels to the total score of the Cloze Test is equivalent to 39.53, which is within the unsatisfactory level.

B. Test of Hypothesis

H1: There are no statistically significant differences at the level of the poetic and prose texts' readability in terms of the gender variable (male, female).

To verify the validity of this hypothesis, the arithmetic average and the standard deviation of both female and male students were calculated in the Cloze Test of the poetic and prose texts' readability. The t-test was performed to determine if there is any significant difference between the students' average score according to gender in the Cloze Test of the poetic and prose texts' readability and the total score. The results are displayed in Table 5.

Table 5: The results of (t-test) of the two independent samples

Research areas	Gender	N	Average	SD	DF	(t) value	Sig.	The decision
Prose texts	Male	192	12.04	2.404	385	24.205	0.000	Significant
	Female	195	17.08	1.609				
Poetic texts	Male	192	5.20	1.345	385	18.260	0.000	Significant
	Female	195	7.46	1.082				
Total score	Male	192	17.24	3.605	385	22.672	0.000	significant
	Female	19	24.55	2.660				

The value of t in the poetic and prose texts and the total score of the Cloze Test is statistically significant at the level of 0.05 which means that there is a statistically significant difference in terms of gender. This difference is due to the females scoring the higher arithmetic average. Therefore, H1 is rejected. This result echoes the results from the studies by [Lami and Zoaeni \(2014\)](#) and [Wzo \(2018\)](#) on text readability.

H2: there are no significant statistical differences between the students' score average in the level of the readability of the poetic and prose texts in the Arabic language book according to the academic average (low, medium, and good).

To verify this hypothesis, the researcher applied the one-way ANOVA test on more than two independent samples to study the differences between the students' score average in the readability test of the poetic and prose texts and its total score, according to their academic average. The results are shown in Table 6.

Table 6: The results of the one-way ANOVA

Research areas	Variance source	Squares' sum	Df	Squares' average	F value	The significant value	The decision
Prose texts	Between groups	2825.930	2	1412.965			Significant
	Inside groups	1250.117	384	3.256	434.022	0.000	
	Total	4076.047	386				
Poetic texts	Between groups	649.488	2	324.744			significant
	Inside groups	423.489	384	1.103	294.463	0.000	
	Total	1072.977	386				
Total score	Between groups	6165.430	2	3082.715			significant
	Inside groups	2878.849	384		411.193	0.000	
	total	9044.279	386				

The difference between the students' average score in the poetic and prose texts and the total score of the Cloze Test according to the academic average is statistically significant at 0.05. Hence, H2 is rejected.

Table 7: The results of the Scheffe test to the subsequent comparisons

Research area	Academic average (I)	Academic average (J)	Differences' average	The significant level	The decision
Prose texts	Low	Medium	-2.98493-	0.00	Significant**
		Good	-6.79471-	0.00	Significant**
	Good	Low	6.79471	0.00	Significant**
Poetic tests	Low	Medium	-1.08239	0.00	Significant**
		Good	-3.19817-	0.00	Significant**
	Good	Low	3.19817	0.00	Significant**
Total score	Low	Medium	-4.06733-	0.00	Significant**
		Good	-9.99288-	0.00	Significant**
	Good	Low	9.99288	0.00	Significant**

(**) significant at the level of indication 0.01

The subsequent comparisons among the categories of the variable of the academic average (low, medium, and good) are shown in Table 7. There are significant statistical differences between the averages of the students with the good, medium, and low academic average, with the highest average being the students with good academic average, as indicated in Table 8.

Table 8: The arithmetic averages, the standard deviations and the standard error to the study answers of the Cloze Test with its total score according to academic average

Research areas	Academic average	sample	Arithmetic average	Standard deviation	Standard error
Total score	Low	118	16.12	4.197	.38638
	Medium	144	20.19	1.706	.14223
	Good	125	26.12	1.798	.16088
	Total	387	20.86	4.840	.24606

Comparatively, these results are similar to the findings reported by [Hwaity \(2010\)](#) and [Wzo \(2018\)](#). The reason for the high scores among the good academic average of Second Grade students could be due to a strong correlation between

the academic level and the understanding of the material. [Lami and Zoaine \(2014\)](#) found that a reader's level of understanding of a printed text is related directly to his or her academic level. In other words, the higher the academic level, the better the student understands the text used in the learning process. The breadth of vocabulary among the students with a good academic average could also account for the difference. With higher linguistic knowledge, these students can identify more words which in turn facilitates the process of reading and remembering the omitted words in the Cloze Test. The statistically significant differences in the readability of the Arabic book of the Second Grade in terms of student's gender and student's academic achievement was at the level of $0.05 \geq \alpha$.

DISCUSSION

The findings of the current study showed that most students have not reached the independent level, where they can read and understand the Second Grade Arabic Language book without their teacher's help or supervision. This finding differs from the findings reported by [Mahmoud \(2012\)](#) and [Wzo \(2018\)](#) that found the readability level of the students to be either at the academic level or the independent level. This finding supports other studies including [Agnihotri and Khanna \(1992\)](#), [David \(2006\)](#), [Jawarna \(2008\)](#), [Arifin et al. \(2013\)](#), [Lusa \(2014\)](#), and [Zorbaz and Mustafa \(2016\)](#) which showed that the books' readability were at the unsatisfactory level. The reason for the different results could be due to the nature of the reading texts in the Arabic language book. Most of them lack any exciting, motivational elements and often do not match the students' needs, capabilities, tendencies, and interests. Besides, the books' lofty concepts could distract the students from paying attention to the text. Other reasons may include lack of variety in linguistic activities, poor use of linguistic knowledge in the educational situations, and lack of communication exercises with others through dialogues and expressive situations.

The readability topic remains the same for both the local and Arab language levels. [Jawarna \(2008\)](#) indicated that the appropriateness of the printed material's readability has not been objectively verified with the reader's ability. [Bassyouni \(2002\)](#) argues that the students' weakness in reading may have caused by their preoccupation to read the text rather than to understand it. Due to this tendency, the students could not develop the proper strategies for organizing and processing the information, which could make them guess the omitted words incorrectly.

Studies suggest that there is a difference in the readability of academic books between males and females. However, this study's findings differ from studies claiming that there is no difference between males and females, for example, [Rashidi \(2005\)](#), [Momni and Momni \(2011\)](#), and [Nasser and Ibrahim \(2013\)](#). The reason for the higher scores among the Second Grade females could be due to the females' advanced cognitive skills over the males. [Hazayma \(2011\)](#) found that females are more capable of using their brain's left hemisphere and its functions than males. Female students' advancement over male students is likely caused by the fact that females tend to mature a year and a half earlier than males, as well as due to other psychological reasons. They are more capable of acquiring and understanding languages than their male counterparts. During the learning process. Students need to remember words, recognize them, and respond to verbal instructions. As readers, students use words to understand meanings, think logically, deal with new verbal stimuli, criticize and analyse during reading, and use language to understand facts and remember them.

The findings of this study provide some indication of the Arabic Language books' readability. The number of students who can read and understand the Second Grade Arabic book without their teacher's help or supervision was only 19.63%. Almost half of the Second Grade students were unable to read or understand the Arabic language book even with the teacher's help and supervision. The readability of Arabic language books is far from the intended reading goals. Therefore, the readability of Arabic Language books used by the students needs to be improved. Improvements can be made with help from the school and the families. Schools can organize Arabic reading activities and programs for the students such as Arabic language club, Arabic week, Arabic poem competition, and Iqra class (Quranic learning and reading class). Schools should also provide teachers with reading strategy training to ensure that they can apply the reading strategy seamlessly in the classroom. Similarly, teachers should have information about the students' gender and academic level differences, as they cluster with significant differences in readability. Most teachers also use dialect when explaining language features, to help students make the transition from dialect to modern standard Arabic. However, this teaching method causes more complications ([Taha Thomure, 2019](#)). Thus, teachers need to use modern standard Arabic with their students.

The students' family also plays an essential role in the readability of Arabic books. Parents and other family members can read Arabic storybooks with the student and teach the students Arabic words by pointing at them. This practice would help the students recognize different words and improve their reading and comprehension skills. [Taha Thomure \(2019\)](#) also reported that most children come to school having acquired a mixture of Arabic dialect, the language of the textbooks, children's literature, and the modern standard Arabic. Furthermore, parents and family members should communicate with the student at home using modern standard Arabic. This practice can help the students overcome the language learning challenges they face at school.

As suggested by [Khalaf \(2015\)](#), the selected textbook must be appropriate for the students' level of learning and has content that is appropriate for the age group. The curriculum design should be in tandem with the teaching methods and the national curriculum. The students' background and experience should be taken into consideration when assessing their ability to understand the text. Furthermore, gender and inclusivity issues should also be given appropriate attention.

CONCLUSION

The findings of the current study provide an essential reference for the Abu Dhabi Educational Council (ADEC), the Abu Dhabi School Model (ADSM), and the Abu Dhabi External Measurement of Student Achievement (EMSA) to reassess the readability of the Second Grade Arabic Language textbook. There is a need to evaluate the Arabic Language textbook to ensure compatibility between the reader and the book. Research and advancement in the field of teaching and learning the Arabic language has made many stakeholders reconsider the common and current practices that have not shown any significant results or improvements. By raising awareness through continuous research, the teaching and learning of the Arabic language, a field that has been stagnant for decades, can be modernized.

LIMITATION OF THE STUDY

This study only involved the Second Grade students. Therefore, readability on this basis does not indicate overall student comprehension. Future studies should look into samples involving other grades and other Cloze Test instruments that could yield a more comprehensive finding.

CO-AUTHORS' CONTRIBUTIONS

Ala Muhammad Al Saadi was responsible for data analysis, literature review, and information collection. Wail Muin Ismail Muhammad was tasked with the data collection and writing the methodology section. Azhar Zailani contributed by adding information, writing the suggestions section, and reviewing the paper. Lastly, Tareq Mohamad Alyatim was in charge of the discussion and suggestion sections. And, Dr. Zaharah was in charge in final version review and guide throughout the study.

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