

THE PERFORMANCE LEVEL OF 10TH GRADE STUDENTS ENROLLED IN THE VOCATIONAL AND TECHNICAL TRACK (BTEC) IN THE READING AND WRITING SKILLS TEST IN THE DIRECTORATE OF EDUCATION FOR AL-JIZAH DISTRICT IN JORDAN

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Abstract: This study aimed to investigate the performance level of 10th-grade BTEC students in the reading and writing skills test administered in schools of the Ministry of Education in the Al-Jizah District. The study sample consisted of 143 male and female students from eight classes (BTEC 10th grade and academic 10th grade) across four schools in the Al-Jizah Directorate in Jordan. The study utilized a standardized test developed by the Jordanian Ministry of Education, assessing reading and writing skills in Arabic for the age group covering both BTEC and academic 10th-grade students. The test comprised ten items: seven multiple-choice questions and three essay-writing prompts. The results indicated statistically significant differences ($\alpha \leq 0.05$) attributable to gender, with an F-value of 18.795 and a significance level of 0.000, favoring female students. Additionally, statistically significant differences ($\alpha \leq 0.05$) were found based on the program type, with an F-value of 18.165 and a significance level of 0.000, favoring the academic program. However, no statistically significant differences ($\alpha \leq 0.05$) were observed due to the interaction between gender and program type, with an F-value of 2.582 and a significance level of 0.110. In light of these findings, the research recommends designing supportive educational programs to enhance male students' academic achievement by developing instructional strategies that address gender differences, thus improving their reading and writing skills. It also recommends enriching the BTEC program with additional reading and writing activities to ensure the development of students' linguistic skills in line with contemporary demands, while fostering stimulating learning environments that consider individual differences.

Keywords: Reading Skill; Writing Skill; Tenth Grade; Vocational and Technical Track.

Introduction

With increasing efforts by the Ministry of Education to develop the overall educational system and particularly enhance vocational education, interest has grown in the BTEC vocational and technical track, an internationally recognized education system. Originating in the United Kingdom, BTEC focuses on advanced vocational education across various fields and has become a distinguished educational option worldwide, including in Jordan.

The growing attention to this program is attributed to its ability to meet labor market needs by preparing students with practical and professional skills aligned with local and global demands. The program's flexibility in learning and emphasis on skill acquisition, coupled with international recognition, opens up opportunities for students both within and outside Jordan.

Reading skill development is a vital cognitive journey that broadens an individual's cultural and scientific horizons. Reading is not just a tool for acquiring information but a process that enhances critical thinking and deep analysis of diverse topics. Research has shown that structured and focused reading contributes to improved concentration and vocabulary expansion, building a solid knowledge foundation that enriches the educational experience (Al-Sharif, 2019).

Meanwhile, Al-Anzi (2022) emphasizes that regular reading fosters creativity and imagination, promoting an independent research-oriented personality and encouraging continuous pursuit of knowledge and new experiences. This greatly enhances academic and professional performance by improving comprehension and analytical skills, moving away from traditional learning methods. Writing, on the other hand, is the essence of expressing and organizing thoughts coherently. It is not merely the recording of superficial information but a creative process reflecting the individual's ability to structure and present ideas methodically and cohesively. Studies have shown that improving writing quality enhances communication effectiveness and the accurate, clear delivery of visions and ideas (Al-Bashir, 2021).

Similarly, Al-Sameer (2020) highlights that regular writing practice cultivates linguistic organization and systematic thinking, making writing an intellectual exercise that nurtures creativity and transforms raw thought into coherent texts. This, in turn, enables effective self-expression and supports academic and professional success.

Thus, reading and writing empower individuals with cognitive construction and clear expression, serving as essential investments for achieving personal and professional excellence. Enhancing these two skills creates a dynamic educational environment that encourages innovation and sustainable development across all life domains.

Theoretical Framework

Al-Sobh (2018) asserts that supportive educational environments significantly contribute to the enhancement of female students' reading and writing abilities, with

social support and teacher guidance playing crucial roles in building self-confidence, resulting in greater linguistic skill development among girls compared to boys. Ahmed (2017) points out that self-commitment and the ability to focus directly impact students' achievements in reading and writing. The study found that females display higher perseverance and discipline when completing tasks requiring precision and patience, positively reflecting on their linguistic capabilities. The study also emphasizes the importance of intrinsic motivation as a key factor in improving reading and writing skills.

From a broader theoretical perspective, Eccles (1987) introduced a model that explains the influence of socialization processes and cultural support in shaping academic performance, particularly in language skills. According to the model, societal expectations and the cultural roles assigned to females in linguistic fields result in their greater participation in language activities, leading to better performance, whereas such contexts may limit language development among males.

Researchers agree that the superior performance of females in reading and writing is not accidental but a reflection of deep educational and psychological influences, consistent with the findings of Al-Sobh (2018) and Ahmed (2017), and aligned with Eccles' (1987) theoretical framework. This highlights the need for further research into strategies that support male students and make learning environments more inclusive by considering individual differences without undermining the capabilities of either gender.

Regarding the impact of program type on students' reading and writing skills, Al-Momani (2019) found that academic programs, compared to technical tracks, focus more on developing analytical reading and critical writing skills. The academic environment's rich content and intensive analytical tasks stimulate critical thinking, thereby improving students' deep comprehension and text analysis skills.

Ibrahim (2020) adds that the density of reading and writing-focused materials in academic tracks significantly enhances linguistic achievement. Structured content delivery and strategies that promote analysis and discussion empower students to develop advanced linguistic skills through regular interaction with in-depth texts and writing tasks. Snow (2002) offers a theoretical framework emphasizing the strong relationship between the nature of curriculum content and teaching strategies in developing reading and writing competencies. Integrating higher-order thinking strategies into curricula enhances linguistic performance by improving students' ability to articulate ideas and interpret texts effectively.

Evidence suggests that academic programs, emphasizing critical analysis and writing development, better equip students to overcome linguistic challenges compared to technical education. Studies by Al-Momani (2019) and Ibrahim (2020) support Snow's (2002) views, emphasizing the need for academic curricula to stimulate active engagement with texts and foster critical thinking skills. Al-Khatib (2016) highlights that gender and program type independently affect academic achievement, with reading and writing performance differences stemming from individual characteristics and socialization rather than a direct interaction between the two variables.

Finally, Bandura's (1997) model attributes students' performance in reading and writing to psychological factors rooted in self-efficacy. A student's belief in their capabilities significantly influences learning behaviors and language task performance. High self-efficacy correlates with better academic outcomes in reading and writing, underscoring the importance of fostering students' confidence as part of language skills development.

Thus, the findings on the independent effects of gender and program type align with Al-Khatib's (2016) and Bandura's (1997) frameworks, suggesting that personal and environmental factors separately determine language skills performance. This emphasizes the need for targeted educational interventions for each factor to improve overall language achievement.

Research Problem

The research problem centers on the need to investigate the extent to which 10th grade students in schools implementing the BTEC system possess reading and writing skills, and to examine the impact of the variables of gender and type of educational program on students' language achievement. Previous studies have indicated that females tend to outperform males in linguistic skills due to educational and psychological factors. Additionally, academic programs with their intensive focus on language subjects and encouragement of analytical thinking contribute to higher achievement levels. Thus, this research seeks to verify the independent effects of gender and program type on students' linguistic performance, whether in reading or writing, and to understand the mechanisms influencing these differences.

Research Questions

Based on the aforementioned research problem, the study proposes a set of research questions aimed at highlighting the relationship between academic and personal variables in the field of language skills, including:

1. Are there statistically significant differences in students' reading and writing skills achievement based on gender?
2. To what extent does the type of educational program (BTEC versus academic) affect students' performance levels in the reading and writing skills test?
3. Is there an interactive effect between the variables of gender and type of program on academic achievement in language skills?

Significance of the Research

The significance of this study lies in its role as a bridge between theory and practice, shedding light on real differences in the linguistic performance of 10th grade students in Ministry of Education schools implementing the BTEC system. By analyzing the impact of key variables such as gender and program type, the study provides a scientific and

systematic framework to assist educational policymakers in adapting and developing curricula to better meet students' individual needs.

Moreover, the findings offer critical insights for enhancing teaching strategies and developing stimulating learning environments that boost academic achievement and align with contemporary educational developments. This directly supports the Ministry of Education's efforts to provide high-quality education.

Research Objectives

The researchers aim to achieve a deeper understanding of the effects of gender and program type on 10th-grade students' reading and writing skills, including the following specific objectives:

1. Analyze gender-based differences by assessing performance levels in reading and writing skills and identifying psychological and educational factors contributing to the superiority of a specific group, particularly females as noted in previous studies.
2. Compare the impact of program type by measuring how the type of educational program (academic versus BTEC) influences students' performance in reading and writing skills, with a focus on the distinctive features of curricula that enhance critical thinking and linguistic abilities.
3. Verify the independence of variable effects by investigating whether the differences arising from gender and program type operate independently without interactive interference affecting students' overall performance.

Research Limitations

This research is limited to:

1. Male and female 10th grade students during the academic year 2024/2025.
2. Ministry of Education schools in Jordan under the jurisdiction of the Al-Jizah Directorate that implement the BTEC system.

Research Methodology and Procedures

Research Method:

This study falls within the framework of descriptive survey research, which aims to describe existing phenomena and draw a comprehensive picture of their dimensions. This is achieved by collecting relevant information and data, as well as reviewing theoretical literature, previous studies, and research related to the current study's topic.

Research Population:

The research population consisted of 10th-grade male and female students enrolled in Ministry of Education schools under the jurisdiction of the Al-Jizah Directorate in Jordan for the academic year 2024/2025, totaling approximately 500 students.

Research Sample:

The study was applied to a purposeful sample of 143 students, whose results in the reading and writing skills test were collected from four schools implementing the BTEC system. The study compared the results of students in the 10th-grade academic program and those in the 10th grade BTEC program.

Research Instruments:

To achieve the study objectives, the researchers utilized the results of a standardized test previously developed and validated by the Jordanian Ministry of Education. The test measured reading and writing skills in the Arabic language for the target age group encompassing both 10th-grade BTEC and academic students. The test comprised 10 items, including 7 multiple-choice questions and 3 essay-writing prompts.

Research Procedures:

The following steps were undertaken to achieve the study's objectives:

1. Obtaining approval from the relevant department at the Al-Jizah Directorate of Education to collect and utilize test results for research purposes after clarifying the research objectives and requirements.
2. Coordinating with the administrations of the selected schools (or their representatives) to facilitate the collection of test results.
3. Identifying the total number of 10th-grade students in the Al-Jizah Directorate and selecting the purposeful research sample.
4. Collecting the students' results in the reading and writing skills test, followed by data entry and statistical analysis using the **SPSS** program.

Statistical Treatments:

To answer the research questions, the data were entered into a computer and analyzed using the Statistical Package for the Social Sciences (SPSS). The following statistical treatments were employed:

- Means and standard deviations.
- Two-way analysis of variance (Two-Way ANOVA).

Presentation and Discussion of Results

Below is a presentation of the study's findings according to the sequence of its research questions, along with a discussion of the results and the recommendations derived from them, as follows:

Main Research Question:

"Are there statistically significant differences ($\alpha \leq 0.05$) in students' performance in the reading and writing skills test based on gender, program type, and the interaction between them?"

To answer this question, the means and standard deviations of students' performance in the reading and writing skills test were calculated according to the variables of gender and program type. The table below presents these results:

Table (1): Means and Standard Deviations of Students' Performance in the Reading and Writing Skills Test According to Gender and Program Type

Gender	Program Type	Mean	Standard Deviation	Number of Students
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Gender	Program Type	Mean	Standard Deviation	Number of Students
Male	BTEC	10.19	4.354	31
	Academic	14.20	3.995	40
	Total	12.45	4.585	71
Female	BTEC	14.25	3.593	40
	Academic	16.06	4.355	32
	Total	15.06	4.024	72
Total	BTEC	12.48	4.407	71
	Academic	15.03	4.233	72
	Total	13.76	4.491	143

The results presented in Table (1) show an apparent variation in the means and standard deviations of students' performance in the reading and writing skills test due to differences among the categories of the variables of gender and program type. To determine the statistical significance of the differences between the means, a Two-Way Analysis of Variance (Two-Way ANOVA) was conducted. The results are presented in Table (2).

Table (2): Two-Way ANOVA Analysis for the Effect of Gender, Program Type, and Their Interaction on Students' Performance in the Reading and Writing Skills Test

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-value	Significance Level (Sig.)	Effect size
Gender	308.648	1	308.648	18.795	.000	.119
Program Type	298.307	1	298.307	18.165	.000	.116
Gender*Program	42.406	1	42.406	2.582	.110	.018
Error	2282.614	139	16.422			
Total	2863.916	142				

Results According to Table (2):

- There were statistically significant differences ($\alpha \leq 0.05$) attributed to the effect of gender, where the F-value was (18.795) with a statistical significance of (0.000). The differences were in favor of females.
- There were statistically significant differences attributed to the effect of the program type, where the F-value was (18.165) with a statistical significance of (0.000). The differences favored the academic program.

- No statistically significant differences were found attributed to the interaction between gender and program type, where the F-value was (2.582) with a statistical significance of (0.110).

Discussion of Results:

First: The Effect of Gender on Students' Achievement in Reading and Writing Skills

The study results indicated statistically significant differences attributable to gender, in favor of females, as females achieved a higher mean score compared to males. This finding is consistent with several previous studies, such as the study by Al-Subh (2018), which highlighted that females outperform males in language skills due to psychological, social, and educational factors. Similarly, Ahmed (2017) found that females demonstrate higher commitment to academic tasks that require precision and patience, positively impacting their reading and writing performance. This superiority is also supported by the theoretical literature on academic achievement theory, which suggests that gender differences may be attributed to socialization and culturally expected roles, where females are encouraged to master and perfect language performance (Eccles, 1987).

Second: The Effect of Program Type on Students' Achievement

The results revealed statistically significant differences attributable to program type, favoring students enrolled in the academic program compared to those in the BTEC program. This finding aligns with the results of Al-Momani's study (2019), which indicated that academic programs focus more on developing analytical reading and critical writing skills compared to technical or vocational programs. Ibrahim's study (2020) also supported this trend, showing that students in academic tracks develop advanced language skills due to the higher intensity of reading and writing-focused curricula. This result is consistent with theoretical literature suggesting that the nature of the academic content plays a critical role in developing reading and writing competencies (Snow, 2002), as academic programs emphasize higher-order thinking strategies, reflected in students' performance on language assessments.

Third: The Effect of the Interaction between Gender and Program Type

The results indicated no statistically significant differences attributable to the interaction between gender and program type, suggesting that each variable independently affects achievement. This finding is consistent with Al-Khatib's study (2016), which showed that the effects of gender and program type on academic achievement are independent and not interactively linked. This result can be explained based on theoretical literature emphasizing the relative independence of academic and personal variables, where the impact of the program is associated with its content and instructional methods, while the effect of gender may relate to individual developmental and social characteristics (Bandura, 1997).

Recommendations:

1. Develop educational programs that support male students' achievement by adopting strategies that consider gender differences, particularly to enhance males' reading and writing skills.
2. Enrich the BTEC program with more reading and writing activities to ensure the development of students' language skills in line with contemporary requirements.
3. Provide motivating and inclusive educational environments that accommodate individual differences without focusing on the interaction between gender and program type.
4. Conduct future studies to explore other factors that may explain achievement differences, such as attitudes toward reading or achievement motivation.

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