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## **Navigating Language Barriers: Hebrew Proficiency and Self-Efficacy Among Muslim Arab Bedouin Students in Israeli Higher Education**

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### **ABSTRACT**

*This study examines the Hebrew language proficiency of Muslim Arab Bedouin students in Israeli higher education, focusing on the four language skills—reading, writing, listening, and speaking—and self-efficacy levels. Using quantitative methods, including standardized language tests and self-efficacy questionnaires, data were collected from thirty-seven students. Results indicate no statistically significant differences in proficiency across the four skills, though female students outperformed males in writing. Writing also showed the strongest correlation with overall language proficiency. Notably, strong correlations were found between reading and speaking, whereas listening exhibited weaker associations with other skills. Self-efficacy levels were higher for productive skills (speaking and writing) than for receptive skills (listening and reading), with reading showing the lowest self-efficacy. The discrepancies between self-efficacy and actual proficiency, especially in receptive skills, underscore the need for strategies to improve students' perceived competence in receptive skills.*

**Keywords:** Language assessment, listening, reading, receptive and productive language skills, second language, speaking, writing

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## INTRODUCTION

In an increasingly globalized academic landscape, the experiences of Muslim students in Western institutions of higher education have gained significant attention. These students face a myriad of challenges, ranging from religious practice accommodations and cultural adaptation to linguistic barriers and social isolation (Asmar et al., 2004; Chen et al., 2019; Ahmed, 2022). While these challenges are common across various Muslim student populations, they manifest uniquely within specific contexts. This study focuses on a particularly underrepresented group within this broader discourse: Muslim Arab Bedouin students in Israeli higher education.

Despite the growing body of research on Muslim students' experiences in Western academia, there exists a significant gap in our understanding of the specific language proficiency challenges faced by Bedouin Arab students in Israeli higher education. While previous studies have examined various aspects of language difficulties among Arab students in Hebrew-speaking institutions (Haskel-Shaham et al., 2018; Henkin, 2020; Abu-Rabiah et al., 2023), they have often focused on written language skills or general academic performance. There is a notable absence of studies that examine all four fundamental language skills—reading, writing, listening, and speaking—in combination, particularly within the Bedouin student population.

## LITERATURE REVIEW

### **Muslim Students in Western Academic Institutions**

Muslim students pursuing higher education in Western academic institutions face many challenges that can significantly impact their academic experience and success. These challenges span various domains, including cultural adaptation, religious accommodation, linguistic barriers, and social integration. Muslim students often struggle with cultural adaptation, encountering differences in social norms, thinking patterns, and educational practices (Mostafa, 2006; Wu et al., 2015). They frequently face difficulties in obtaining accommodations for religious practices, such as prayer times and dietary requirements (Chen et al., 2019). Issues related to dress codes, particularly for women wearing hijab, can lead to feelings of otherness and potential discrimination (Ahmed, 2022).

Language difficulties pose significant academic hurdles, affecting communication with professors and peers, as well as performance in coursework (AlAamri, 2013; Wu et al., 2015). The intersection of national culture, religion, and academic integrity presents unique obstacles, particularly in countries where Muslims are a minority (Akbar & Picard, 2020). Many Muslim students experience social isolation and struggle to engage in group activities, impacting their sense of belonging within the academic community (Wu et al., 2015; Chen et al., 2019). They may encounter stereotypes, Islamophobia, and a lack of understanding from the broader university community (Chen et al., 2019; Ahmed, 2022). Mental health concerns are prevalent, with Muslim students being less

likely to seek help from mental health services compared to their non-Muslim counterparts (Al-Krenawi & Graham, 2011). These challenges don't end with their time abroad; a study on Saudi students returning home after studying in the United State found that those reporting higher levels of reverse culture shock also reported lower life satisfaction and quality of life, highlighting the long-term impact of cross-cultural educational experiences (Al-Krenawi & Al-Krenawi, 2022; Alkhalaf et al., 2024).

Despite these challenges, research indicates that Muslim students often maintain strong academic satisfaction and commitment (Asmar et al., 2004). Moreover, some cultural and religious practices can support academic integrity (Akbar & Picard, 2020). The presence of local Muslim communities and organizations can ease the adjustment process for these students (Mostafa, 2006). To address these multifaceted issues, institutions are encouraged to implement comprehensive support frameworks (Ahmed, 2022), improve cultural responsiveness (Chen et al., 2019), and foster an inclusive academic environment (Asmar et al., 2004). Additionally, enhancing cooperation with Muslim cultural and religious organizations and providing culturally responsive education can significantly improve the experiences of Muslim students in Western academic settings (Mostafa, 2006; Wu et al., 2015; Chen et al., 2019).

### **Specific Challenges Faced by Muslim Arab Bedouin Students in Israeli Higher Education**

The Bedouin Arab community in Israel, primarily located in the Negev (or Naqab) desert, is a Muslim society undergoing rapid modernization and urbanization. As of 2023, approximately 300,000 Bedouins live in the Negev, with 71% residing in recognized settlements and 29% in tribal areas (Knesset - Information and Research Center, 2023). This community faces significant socioeconomic challenges, ranking lowest among all social groups in Israel (Shvarts et al., 2003). The Bedouin educational system, operating within the larger Arab minority education framework, suffers from a lack of qualified teachers, inadequate facilities, high dropout rates, and poor matriculation exam performance (Abu-Saad, 1996, 2016). These factors, compounded by the community's low socioeconomic status, significantly impact Bedouin students' access to and success in higher education.

Bedouin Arab students in Israeli higher education face a complex array of challenges stemming from structural, cultural, and socioeconomic factors. Language barriers, particularly in reading and writing Hebrew, create significant difficulties and contribute to a sense of alienation in academic environments (Alkahr & Tal, 2016; Abu-Ajaj, 2018). This linguistic challenge is particularly noteworthy, as research on Muslim students in the United States has shown that smooth acculturation is strongly related to confidence in English-language competence (Al-Krenawi et al., 2021). Cultural differences and exclusion by universities further exacerbate this feeling of estrangement (Halabi, 2016). Bedouin women face additional barriers due to traditional gender roles and family expectations, which can limit their educational opportunities (Abu-Rabia-Queder,

2014; Abu-Saad et al., 2017; Refaeli et al., 2022). Moreover, Bedouin students exhibit higher levels of depressive and somatic symptoms compared to their Jewish peers, partly due to lower levels of perceived social support (Abu-Kaf et al., 2019).

Despite these challenges, Bedouin students demonstrate resilience and view higher education as essential for personal and communal development. Education is seen as a source of pride and status improvement for students and their families, with parental support, including financial assistance, contributing significantly to students' academic progress (Abu-Gweder, 2024). However, systemic inequities persist in the provision of educational services and access to higher education for Negev Bedouin Arabs (Abu-Saad, 1996). Addressing these challenges requires a multifaceted approach that considers the unique cultural context and needs of the Bedouin community, including more culturally sensitive admissions procedures, increased financial aid, and removal of minimum age requirements for higher education (Abu-Saad, 2016).

### **Importance of Hebrew Language Proficiency for Academic Success**

Hebrew language proficiency plays a crucial role in the academic success and social integration of Arab students in Israel's higher education system. Research consistently demonstrates a strong positive correlation between Hebrew language skills and academic achievements, motivation, and self-image among Arab students in higher education (Tarabia, 2023). This proficiency is essential for Arab students to integrate into higher education and the labor market in Israel, helping them overcome barriers such as limited access to educational resources and employment opportunities (Abbas & Mendel, 2022; Manor & Binhas, 2023; Manor & Watad, 2024). However, Bedouin students often face challenges due to their limited productive vocabulary in Hebrew, which typically includes only 1000 words, hindering their ability to communicate effectively and succeed academically (Abu-Rabiah, in-press).

The lack of Arabic language courses in Israeli academia can further hinder Arab students' academic performance and sense of belonging (Halabi, 2022). To address these language challenges, a trilingual teaching model incorporating Arabic, Hebrew, and English has shown promising results in improving academic literacy skills among Bedouin students (Hauptman et al., 2008). This approach can enhance overall academic performance by providing a broader linguistic foundation and promoting cognitive development. Cultural familiarity in learning materials also significantly impacts comprehension, with Arab students performing better on texts from their own cultural background (Abu-Rabia, 1998). This suggests that cultural relevance can enhance motivation and engagement in learning Hebrew.

However, the current Hebrew language curriculum in Arab schools may not always align with the cultural identity of Arab students, posing challenges to their motivation and engagement (Or & Shohamy, 2016). The primary motivation for learning Hebrew among Arab students is instrumental, driven by practical needs rather than a desire for cultural integration (Abu-Rabia, 1998). To address these

issues, it is essential to develop culturally sensitive and inclusive Hebrew language curricula that resonate with Arab students' cultural identities (Manor & Watad, 2024).

### **Previous Studies on Language Difficulties Faced by Arab Students in Hebrew-Speaking Institutions**

Arab students in Hebrew-speaking institutions in Israel face considerable language barriers, with Hebrew as their second language (L2) posing particular challenges, especially for those with learning disabilities (Olenik-Shemesh et al., 2020; Cohen-Azaria & Zamir, 2021). Cultural differences and limited academic preparation further complicate their adjustment (Cohen-Azaria & Zamir, 2021), and many students report feelings of alienation and exclusion in these environments (Halabi, 2016). However, support centers and encouraging lecturers have been shown to positively influence academic outcomes for Arab students (Olenik-Shemesh et al., 2020; Cohen-Azaria & Zamir, 2021). Attitudes towards bilingualism in Arabic and Hebrew often reflect students' ethnolinguistic identities, and coping strategies like family support and a drive for social change, particularly among female students, play a crucial role in their perseverance (Cohen-Azaria & Zamir, 2021).

In the broader context of bilingualism, Arab children in Israel also face difficulties learning Hebrew. A culture-based curriculum incorporating Arab cultural elements could make Hebrew more engaging and comprehensible for them (Abu-Rabia, 1999). Arab students in higher education often struggle to acquire spoken Hebrew for both academic integration and labor market readiness, while simultaneously grappling with their identification with Jewish-Israeli values (Manor & Binhas, 2023). Parents of young Palestinian-Arab students perceive learning Hebrew as essential for integration but also as a challenge and a threat to their cultural identity (Amara, 2023). Moreover, tensions between the minority community and the dominance of Hebrew in schools complicate Hebrew instruction for Palestinian students (Amara, 2007).

For Arab Bedouin students, expressing themselves in literary Arabic is challenging in oral form, though they tend to perform better in writing in Arabic than in Hebrew (Abu-Gweder, 2023). Higher self-reported proficiency in Hebrew correlates with improved academic and social self-image, motivation, and achievements in Arab students (Tarabia, 2023). However, common interference errors from Arabic persist in their written Hebrew (Henkin, 2020; Abu-Rabiah et al., 2023). These findings highlight the complex interplay between language, identity, and academic success for Arab students in Hebrew-speaking institutions.

### **Gap in Research Specifically Addressing Bedouin Arab Students from the Negev**

Research on the Hebrew language proficiency of Bedouin Arab students from the Negev is notably sparse, despite its importance. While many studies on Arabic speakers in Israel have concentrated on sociolinguistic factors, language use, and

education policy (Abu-Rabiah, 2022), fewer have delved into the linguistic challenges specific to this group. The existing research largely focuses on common language errors, such as those in vocabulary, syntax, phonology, orthography, morphology, and semantics, often linking these mistakes to the influence of the students' first language (L1) or issues in the language learning process, as well as vocabulary development (Abu-Rabiah, 2020, 2023, 2024). Some studies in this area include Henkin's (2020) examination of error persistence across different age groups in the Negev, and recent work by Abu-Rabiah et al. (2023), which investigates interference and syntactic developmental errors in Hebrew learning among Bedouin high school students.

However, these studies have primarily focused on written Hebrew, representing only one aspect of overall language proficiency. Language competence includes four core skills: reading, listening, speaking, and writing (Hinkel, 2006; Newton, 2016; Darancik, 2018), each with its own set of sub-skills and challenges. Speaking and listening, in particular, are often considered the most difficult skills due to their lower exposure in daily life compared to reading and writing (Newton, 2016). Traditionally, language instruction has been divided into distinct skill sets, taught in a specific sequence—speaking, listening, reading, and writing (Hinkel, 2010). Although these skills were once seen as either active (speaking, writing) or passive (reading, listening), they are now recognized as actively involved in meaning negotiation (Savignon, 1991; Piniel & Albert, 2018), with current teaching practices emphasizing the integration of these skills (Hinkel, 2010).

Despite this shift in language teaching, research on Hebrew as an L2 among Arabic speakers, especially within the Bedouin community, has yet to address all four language skills in a unified manner. This study aims to fill that gap by evaluating Bedouin Arab students' proficiency in listening, speaking, reading, and writing, providing a more comprehensive understanding of their Hebrew language skills.

## **METHOD**

### **Research Questions**

This study aims to address the following research questions:

RQ1: What are the differences in proficiency across the four Hebrew language skills (reading, writing, listening, and speaking) among Muslim Arab Bedouin students in Israeli higher education, and do these differences vary by gender?

RQ2: What are the correlations between the four Hebrew language skills, and how do these correlations differ by gender?

RQ3: How do the four language skills correlate with overall language proficiency, and are there gender-based differences in these correlations?

RQ4: What are the differences in self-efficacy across the four Hebrew language skills according to the Questionnaire of Self-Efficacy in Learning a Foreign Language (QSLL)?

## **Participants**

Thirty-seven Muslim Arab Bedouin students enrolled in a Bachelor of Education (B.Ed.) program at an Israeli higher education institution participated in this study. Of the participants, 28 were female, and 9 were male, all of whom attended Israeli schools where Arabic is the primary language of instruction. Hebrew is introduced formally in the second grade, with 2-5 hours of weekly instruction throughout their schooling, though often in conjunction with Arabic (Abu-Rabiah et al., 2023; Manor & Watad, 2024). By the time of the study, their Hebrew proficiency is at the B1 level according to the Common European Framework of Reference for Languages (CEFR), reflecting a functional but intermediate level of language use, where students can handle everyday situations but face challenges in more complex academic contexts. These students took part in a one-year Hebrew language proficiency course, designed to enhance their language skills in an academic context.

## **Setting**

The study occurs at the conclusion of a one-year Hebrew language proficiency course, which runs for two hours per week across two academic semesters. The course develops students' reading, writing, listening, and speaking skills. Importantly, Hebrew is used as the sole medium of instruction in this course, despite the students' native language being Arabic. A native Arabic-speaking teacher facilitates the learning process, offering insight into both linguistic and cultural challenges.

## **Data Collection**

Data were collected from two primary sources: the students' final Hebrew proficiency test and an adapted Hebrew version of the Questionnaire of Self-Efficacy in Learning a Foreign Language (QSL). The test is divided into four sections, each designed to assess specific competencies:

### *1. Reading:*

Students are required to read a text and summarize its main points. Research supports summary writing as an effective strategy for improving reading comprehension, as it integrates both reading and writing skills. This method has been shown to enhance students' ability to process and understand texts more deeply (Shokrpour et al., 2013; Mokeddem & Houcine, 2016). Studies also indicate a significant positive correlation between summary writing and overall language proficiency, particularly in reading comprehension (Qin & Groombridge, 2023).

### *2. Writing:*

The writing component tests students' ability to insert non-frequent words and common idioms into sentences. This method evaluates both lexical knowledge and the ability to use sophisticated language items. Research highlights that the use of non-frequent words is a strong indicator of language proficiency, as

learners struggle more with low-frequency words (Kandel & Perret, 2015; Monteiro et al., 2020). Idiom usage has been linked to improved writing quality and is positively correlated with higher proficiency levels (Hoang & Boers, 2018).

### 3. *Listening:*

Listening skills are assessed through an educational podcast by a native Hebrew speaker, followed by comprehension questions. Podcasts provide authentic language input, which has been shown to improve listening skills and comprehension of native speakers' pronunciation and vocabulary (Wiyannah, 2015; Gonulal, 2020). Listening comprehension is a key aspect of language learning that is often neglected in traditional classroom settings (Gilakjani, 2016), yet is crucial for developing proficiency (Sherrow, 1971). Research supports the use of podcasts in language learning, showing that they enhance students' listening abilities and overall language skills (Sejdiu, 2017).

### 4. *Speaking:*

For the speaking test, students are given a week to prepare for a specific topic. They are evaluated based on their ability to articulate their ideas clearly and accurately. Research suggests that providing students with planning time can improve fluency, lexical density, and accuracy (Mehnert, 1998; Li et al., 2015). Moreover, topical knowledge significantly influences speaking performance, especially in integrated speaking tasks (Huang et al., 2018).

In addition to the final exam, data were collected using an adapted Hebrew version of the Questionnaire of Self-Efficacy in Learning a Foreign Language (QSL) (see Appendix 1). Administered two months after the course ended, the QSL is an 11-item scale that assesses learners' self-efficacy across both receptive (listening, reading) and productive (speaking, writing) skills (Putwain et al., 2022). Developed through rigorous factor analysis, the QSL provides a reliable and efficient measure of overall language learning confidence. Fifteen participants responded on a Likert scale from 1 to 5, with higher scores indicating greater self-efficacy.

## **Data Analysis**

Data analysis involved both descriptive and inferential statistical methods. Descriptive statistics (means, standard deviations, minimum and maximum scores) were calculated for each language skill. A one-way ANOVA was conducted to examine differences across the four skills, while independent samples t-tests investigated gender differences. Pearson correlation coefficients were calculated to examine relationships between skills and with overall proficiency, both for the entire sample and by gender. For the QSL data, repeated measures ANOVA with post-hoc Tukey's HSD tests were performed to analyze differences in self-efficacy across skills. Effect sizes were reported using Cohen's  $d$  for t-tests and eta-squared ( $\eta^2$ ) for ANOVA results. The significance level for all inferential tests was set at  $\alpha = .05$ . Visualizations were created to illustrate key findings, including gender differences, correlations between skills, and relationships with overall proficiency.



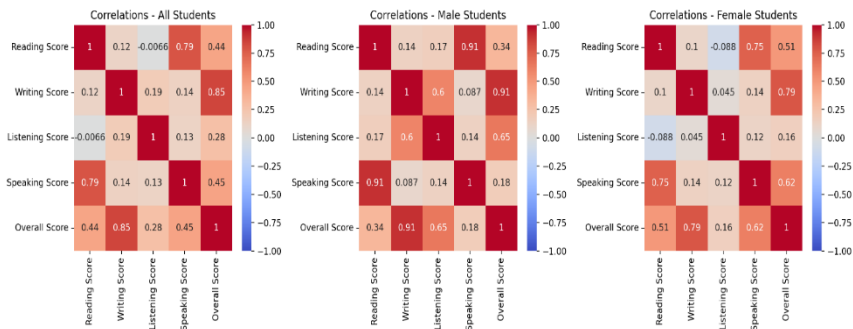
## RESULTS

The study analyzed data from 37 participants (28 females, 75.68%; 9 males, 24.32%). To address RQ1, descriptive statistics were calculated for the four Hebrew language skills across all participants: reading ( $M = 81.89$ ,  $SD = 19.33$ ), speaking ( $M = 80.54$ ,  $SD = 21.07$ ), listening ( $M = 77.30$ ,  $SD = 12.34$ ), and writing ( $M = 76.38$ ,  $SD = 21.60$ ) (see Table 1). A one-way ANOVA revealed no statistically significant differences between the skills,  $F(3, 144) = 0.70$ ,  $p = .551$ . However, a significant gender difference was found in writing scores, with females outperforming males,  $t(35) = 2.84$ ,  $p = .008$ , Cohen's  $d = -1.08$ .

**Table 1: Descriptive Statistics for Hebrew Language Skills Across All Participants**

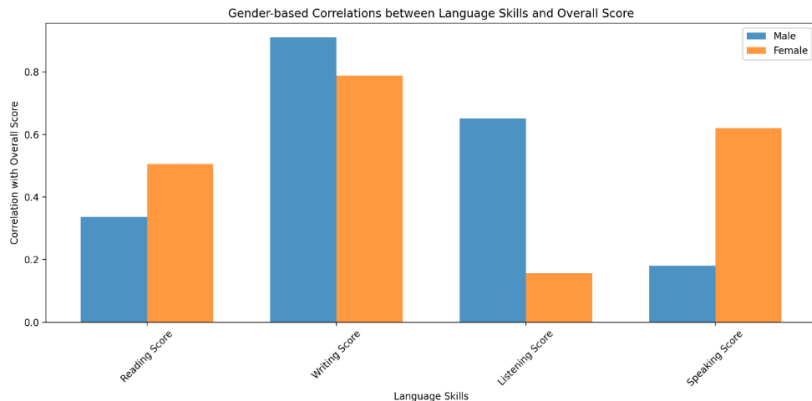
Skill	Mean score	Standard deviation	Minimum score	Maximum score
Reading	81.89	19.33	0	96.67
Writing	76.38	21.6	22	96
Listening	77.3	12.34	55	100
Speaking	80.54	21.07	0	100

For RQ2, correlation analyses were conducted between the four language skills (see Figure 1). A strong positive correlation was found between reading and speaking ( $r = .79$ ), while other skills showed weak to moderate positive correlations. Listening demonstrated the lowest correlation with other skills. Gender-specific analyses revealed stronger correlations between speaking and other skills for females, while males showed stronger correlations between listening and other skills.



**Figure 1: Correlations Between Hebrew Language Skills**

Addressing RQ3, correlations between each language skill and overall proficiency score were examined (see Figure 2). Writing showed a very positive correlation with overall score ( $r = .85$ ). Speaking ( $r = .45$ ) and reading ( $r = .44$ ) showed moderate correlations, while listening had the weakest association ( $r = .28$ ). Gender-based analyses indicated that writing was most predictive of overall proficiency for both genders, while listening was least predictive, particularly for male students.



**Figure 2: Correlations Between Hebrew Language Skills and Overall Proficiency Scores**

To answer RQ4, differences in self-efficacy across the four language skills were analyzed using the QSL data ( $n = 15$ ). Descriptive statistics revealed that speaking had the highest mean score ( $M = 4.24, SD = 1.03$ ), followed by writing ( $M = 4.16, SD = 1.00$ ) and listening ( $M = 3.98, SD = 0.76$ ), while reading had the lowest mean score ( $M = 3.27, SD = 1.24$ ) (see Table 2). A repeated measures ANOVA showed a significant main effect of Skill,  $F(3, 42) = 7.14, p = .0006, \eta^2 = .337$ . Post-hoc Tukey's HSD tests indicated no statistically significant pairwise

differences, although the difference between reading and speaking approached significance ( $p = .0535$ ).

**Table 2: Self-Efficacy Scores for the Four Language Skills Based on the QSL**

Skill	Count	Mean score	Standard deviation	Minimum score	Maximum score
Listening	15	3.98	0.76	1.67	5
Reading	15	3.27	1.24	1	5
Speaking	15	4.24	1.03	1	5
Writing	15	4.16	1	1.33	5

## DISCUSSION

This study examines gender-based differences in Hebrew language proficiency among Muslim Arab Bedouin students in Israeli higher education across the four language skills: reading, writing, listening, and speaking. The analysis did not find statistically significant differences across the four language skills, suggesting that students generally perform similarly across these areas. However, writing scores were consistently lower than other skills on average, indicating specific challenges in mastering written Hebrew. This aligns with research suggesting that writing is more cognitively demanding than reading, listening, and speaking (Tindle & Longstaff, 2015). The increased cognitive load in writing is attributed to the multiple elements writers must balance simultaneously, including content, organization, grammar, and mechanics (Abu Rass, 2001). Bourdin and Fayol (1994) explain this difficulty through the working memory approach, positing that low-level writing activities consume cognitive resources, leaving fewer resources available for higher-level processes. Furthermore, Emig (1977) argues that writing uniquely corresponds to certain powerful learning strategies, making it a distinct mode of learning compared to other language skills.

A notable finding of the current study was the superior performance of female students in writing skills. This gender disparity aligns with consistent research findings showing that females outperform males in L2 writing skills. Denies et al. (2022) observed that females generally performed better than males in L2 competencies, with writing being particularly prone to gender differences. Similarly, Van Der Slik et al. (2015) found that female learners of Dutch as an L2 consistently outperformed males in speaking and writing proficiency across various countries and language families. These gender differences may be

attributed more to social rather than biological factors, as suggested by cross-country variations (Denies et al., 2022). Motivational factors, such as the appeal of language courses and the value attributed to L2 learning, can explain up to 60% of the female advantage (Denies et al., 2022). Additionally, Pajares and Valiante (2001) found that gender differences in writing motivation and achievement were related to gender-stereotypic beliefs rather than gender itself. While females scored slightly higher across all language skills, no other gender differences were statistically significant. This suggests that gender may not play as pivotal a role in overall language proficiency as it does specifically in writing.

The correlation analyses revealed notable patterns in the relationships between the four language skills, particularly between reading and speaking. The strong positive correlation between these two skills suggests that students proficient in reading Hebrew are also likely to excel in speaking it. This aligns with research showing that reading plays a significant role in developing speaking skills, particularly through vocabulary expansion (Mart, 2012; Sobhanifar & Ranjbaran, 2023). Furthermore, Babayiğit (2014) found that oral language skills are a powerful predictor of reading proficiency, indicating a bidirectional relationship between the two. Extensive reading enhances vocabulary knowledge, which is essential for both reading and speaking proficiency (Mart, 2012; Hamrayevna & Rashidovna, 2019). Additionally, reading aloud has been shown to improve pronunciation and fluency, especially in secondary school students (Siyami et al., 2020). The use of reading strategies not only aids comprehension but also contributes to the development of speaking skills (Khalili et al., 2024). This progression from input (reading) to output (speaking) is particularly valuable for learners of foreign or second languages. Educators and learners are therefore encouraged to use effective reading strategies to enhance comprehension and support fluent communication (Khalili et al., 2024).

Interestingly, the listening skill showed the weakest correlations with other skills, indicating that listening might function somewhat independently in this student population. This finding underscores the need for targeted listening comprehension practice in language instruction for Bedouin students. Gender-based analyses of the correlations between language skills revealed further distinctions. Female students exhibited stronger correlations between speaking and other skills. Male students, on the other hand, showed a stronger correlation between listening and other skills, suggesting that listening plays a more central role in their overall language development.

The correlation between each language skill and the overall language proficiency score provided additional insights into which skills are most predictive of overall proficiency. Writing was found to have the strongest correlation with overall proficiency ( $r = .85$ ), underscoring its importance in determining language mastery for this group. This finding aligns with research showing that writing quality is a significant predictor of L2 proficiency. Lee et al. (2021) found that lexical complexity is a stronger predictor of L2 writing quality than syntactic complexity, particularly in adolescent learners. Consolini and Kyle (2024) noted that features such as lexical diversity, the variety of words used in a sample, and sophisticated vocabulary usage correlate positively with

higher proficiency scores in L2 writing. Lexical diversity is considered a critical component of L2 proficiency (Malvern et al., 2004; McCarthy & Jarvis, 2007). Furthermore, Dobrić (2023) suggests that the identification of context-appropriate text features, termed "assessment-positives," can provide insights into L2 writing competence, indicating successful language acquisition. In contrast, listening had the weakest correlation with overall proficiency ( $r = .28$ ), particularly for male students. These results suggest that writing ability is a key indicator of overall proficiency, regardless of gender, while listening may contribute less to overall language development, especially for males.

The findings on self-efficacy across the four Hebrew language skills highlight differences in students' perceived competence. Speaking emerged with the highest mean self-efficacy score, suggesting that students feel most confident in their verbal expression abilities. This aligns with Abid's (2012) finding that Iraqi EFL students considered speaking easier than listening comprehension. Writing closely followed speaking in terms of self-efficacy, which is noteworthy given that writing is typically viewed as more challenging than speaking (Abu Rass, 2001; Tindle & Longstaff, 2015).

Listening self-efficacy, while still relatively high, was lower than that of speaking and writing. This suggests that students feel somewhat less confident in their ability to understand spoken Hebrew, which could be linked to the earlier finding that listening had the weakest correlation with other skills. The challenges in listening comprehension, such as the need to process input quickly without a "second chance" (Mendelsohn & Rubin, 1995), and the often-overlooked nature of listening skills in language courses (Gilakjani & Sabouri, 2016), may contribute to this lower self-efficacy. Interestingly, reading showed the lowest self-efficacy scores among the four skills. This could be attributed to the complex nature of written language, particularly in academic contexts. Written language tends to have greater lexical diversity and complexity, with more nouns and longer noun phrases (Poiret & Liu, 2020; Moghadam et al., 2024). Academic texts often contain challenging linguistic features such as high lexical density and heavy nominalizations, making them difficult to decode (Ventola, 1996). The near-significant difference between reading and speaking self-efficacy suggests a perceived gap between students' ability to engage in everyday spoken communication and their capacity to comprehend more abstract written materials.

The repeated measures ANOVA revealed a significant main effect of skill, confirming that students' self-efficacy levels vary significantly across the four language skills. However, the lack of statistically significant pairwise differences, despite the main effect, indicates that students' confidence in their Hebrew abilities is relatively balanced across speaking, writing, and listening. This finding suggests that while there are variations in self-efficacy across skills, these differences are not stark enough to create clear hierarchies of perceived competence.

## CONCLUSION

This study explored Hebrew language proficiency among Muslim Arab Bedouin students in Israeli higher education, examining skill performance, gender differences, and self-efficacy across reading, writing, listening, and speaking domains. While no statistically significant differences emerged across language skills, writing consistently presented the most challenging area, with female students demonstrating superior performance. Correlation analyses revealed a strong positive relationship between reading and speaking skills, suggesting that proficiency in one domain potentially enhanced performance in the other. Writing exhibited the strongest correlation with overall language proficiency, indicating its critical role in language mastery. Self-efficacy findings demonstrated that students perceived their productive skills (speaking and writing) more positively than receptive skills (reading and listening), with speaking generating the highest confidence levels.

## IMPLICATIONS, LIMITATIONS AND FUTURE DIRECTIONS

The observed disparities in self-efficacy—particularly the lower confidence in receptive skills like reading and listening—underscore the need for tailored strategies to bolster students' perceived competence in these areas. By fostering a more supportive learning environment that includes focused practice in listening and reading, educators can enhance overall language proficiency and empower students to engage more effectively with academic texts and spoken language.

With a small sample size ( $n=37$ ), the study's generalizability is limited. Future research should include larger, more diverse samples and adopt longitudinal designs to track language development over time. Qualitative studies examining the experiences of Bedouin students learning Hebrew can offer deeper insights into the specific challenges and strategies employed in academic contexts, providing a more comprehensive understanding of their language acquisition journey.

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