

## Investigating the Use of English Conjunctions during Speaking among Iranian Medical Students: Frequent Usage and Errors

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### Abstract

Given the significant role of conjunctions in ensuring clarity and precision in medical communication, this study aimed to examine the recurring patterns of conjunction use and conjunction-related errors in the spoken English of non-English-speaking medical students. The present study, conducted at a medical university in Iran, was a cross-sectional, descriptive, and comparative applied research design focused on learner-produced spoken data. The participants were 123 students aged between 20 and 21, enrolled in Technical English 1. They were asked to deliver a lecture of no more than five minutes on two specific diseases: fatty liver and asthma. The recordings were then transcribed and analyzed by the researchers, and the frequency of errors in each type of conjunction was identified and calculated. Regarding coordinating conjunctions, and, but, so, or, and yet appeared with frequencies ranging from highest to lowest. Among subordinating conjunctions, if, when, while, as, though, because, since, whereas, after, and before were observed from highest to lowest frequency. Considering conjunctive adverbs, also, however, additionally, in addition, therefore, as a result, thus, moreover, and nevertheless were the most to least common. The results of the Chi-square test showed no statistically significant difference in the use of coordinating conjunctions, subordinating conjunctions, and conjunctive adverbs ( $p > .05$ ) between males and females. It was concluded that explicit training in conjunctions is not a requisite based on gender; instead, it should prioritize areas of common difficulty for all learners. Incorporating authentic input and direct feedback in teaching conjunctions can help improve students' professional communication skills, which are critical for their future medical practice.

### Keywords:

Conjunctural Errors,  
Speaking Skill,  
Medical Students

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## 1. INTRODUCTION

English proficiency is an essential skill for medical practitioners globally, facilitating communication across academic, clinical, and research settings, which comprises continuing professional development (Chan et al., 2021). In many clinical and academic settings, English functions as a lingua franca, making this proficiency indispensable for medical practitioners globally (Al-Mahrooqi & Denman, 2020). Iranian medical learners who are non-native English speakers rely on the precise use of conjunctions to construct well-organized and meaningful sentences in verbal and written communication. Conjunctions are an essential grammatical element that is used to illustrate cohesion throughout concepts, clarify relationships between clauses, and enhance the coherence of oral presentations (Celce-Murcia, 2016). However, despite their importance, English language learners tend to misuse conjunctions, which causes communication breakdowns and impairs meaningful interaction (Zhang et al., 2022).

Studies on non-native English acquisition have consistently identified conjunctions as one of the most complex grammatical items to acquire (Liu & Braine, 2005). This is due to the complexity of conjunction rules, L1 interference, and the lack of explicit instruction in EFL within instructional systems (Ellis, 2015). As far as Iranian EFL learners are concerned, studies have shown that Persian syntax and conjunction usage significantly differ from English ones, leading to frequent translation and application errors (Khoshshima & Banaruee, 2017). Prator's (1967) Level 2 of difficulty, under-differentiation, is a classic example of this problem, where an item that exists in L1 is absent or merged in L2, causing learning challenges. These linguistic differences further compound the challenges that Iranian medical students face, as they often find themselves unable to use English conjunctions correctly in speech.

The rising pace of global dynamics in medical practice and education emphasizes the relevance of this study. There is a strong demand among students and health practitioners for engagement in global conferences, interaction with colleagues with a multilingual background, and utilization of the immense pool of highly qualified research, mostly shared in English (Flowerdew, 2014). In this context, persistent errors in conjunction usage hinder efficient communication, resulting in challenges in educational or professional contexts (Al-Mahrooqi & Denman, 2020). Moreover, speaking competence is intrinsically linked with problem-solving as well as analytical skills, skills deemed crucial for practitioners in the health industry (Krashen, 1982).

Although research on English language acquisition among Iranian learners is growing, a notable shortage still exists in studies investigating conjunctive errors in medical students' spoken discourse. Most available literature is limited to written communication and general EFL learners, thus leaving a wide gap in research that seeks to explore the specific issues of medical students (Hashemian & Soureshjani, 2011). This research aimed to fill the gap by examining both the repeated conjunction errors and the most frequently used conjunctions in the spoken English of Iranian medical students.

## 2. LITERATURE REVIEW

An effective use of conjunctions is central to second language acquisition, especially in academic and workplace contexts where accuracy of language and coherence is critical. Conjunctions, typically grouped into coordinating, subordinating, and correlative forms, serve as cohesive markers that help establish logical, temporal, or contrasting relationships between discourse units and clauses (Celce-Murcia, 2016; Quirk & Crystal, 2010). Together with their syntactic functions,

these features are acknowledged as strong markers of discourse ability and syntactic maturity, which mirrors the general clarity evident in spoken and written communication (Bachman, 2010).

However, the use of conjunctions presents difficulties for EFL learners due to the syntactic and semantic intricacies involved in their application. Research shows that EFL learners frequently misuse coordinating conjunctions such as "and" and "but" due to negative transfer from their first language and insufficient authentic input (Heidari-Shahreza, 2018). Students must struggle not only with grammatical constraints governing conjunction placement and combination but with subtle discourse-level functions sensitive to context. Iranian EFL learners must face these challenges in addition to typological and rhetorical contrasts between English and Persian. Persian favors paratactic structures—placing two adjacent clauses without any subordinating elements—while English relies more on hypotactic relations to convey hierarchical relationships between clauses (Khoshshima & Banaruee, 2017). As a result, students tend to omit obligatory subordinating conjunctions or misuse coordinating ones where more complex syntactic patterns are needed (Dabaghi, 2006). To explain such linguistic phenomena, theoretical models such as the Contrastive Analysis Hypothesis (CAH) and Error Analysis (EA) are particularly suitable.

The CAH, as advocated by Lado (1957), posits that structural contrasts between L1 and L2 can predict learning difficulties, mainly when features of the target language are absent or marked differently in the native language. This theory suggests that difficulty with English conjunctions among Iranian learners can be attributed to the absence of corresponding structures or the overuse of coordinate patterns in Persian. In contrast, as suggested by Selinker (1972), EA goes beyond comparative remarks and focuses on the learners' actual language performance. It highlights the categorization of error types and their sources—whether due to interlingual transfer (influence of L1), intralingual sources (such as overgeneralization), or learning developmental stages. These theories explain why students tend to over-rely on simple conjunctions, such as 'and', and not employ or abuse more complex ones, such as 'although', 'whereas', or 'in spite of'. Spontaneous speech challenges this process because students must draw upon and sequence conjunctions immediately, without the opportunity to revise or edit their production. In medicine, where the application of spoken precision is tied to the ability to explain complex processes or differential diagnoses, such shortcomings can result in communication failures. While females generally demonstrate higher verbal fluency and communicative competence in English, gender does not significantly influence specific grammatical features like conjunction use (Nasha & Kipkemboi, 2024). The correct and varied application of conjunctions in speech is therefore not so much a matter of grammatical correctness as it is of professional expertise as well (Krashen (1982) Empirically, various studies have researched conjunction errors in written and verbal English among EFL learners. Liu and Braine (2005) analyzed argumentative writing by Chinese learners. They found widespread misuse of causal conjunctions, including "because" and "since," which is most often brought about by overgeneralization and a lack of sufficient exposure to authentic input. Similarly, Zhang et al. (2022) analyzed Chinese EFL learners' written data and identified missing or misplaced conjunctions, particularly in spontaneous speech—a phenomenon attributed to L1 interference and a lack of practice in oral discourse settings. Explicit teaching of conjunctions as cohesive devices has been shown to significantly improve EFL learners' writing and speaking cohesion (Alawerdy & Alalwi, 2022).

In the Iranian EFL setting, Hashemian and Soureshjani (2011) identified conjunction-related issues as among the most prominent grammatical problems in student writing. They indicated an overreliance on simple coordinating conjunctions and restricted use of subordinators and conjunctive adverbials, thus giving rise to highly simplistic sentence patterns. Khoshshima and Banaruee (2017) traced this study all the way through to oral speech. As they explicitly reported, the effect of Persian syntax, i.e., the non-use of conjunctions in conveying complex thoughts, plays

a critical role in learners' shaping of oral mistakes. These findings suggest that the challenges cannot be explained by instruction alone but are instead grounded in students' L1-influenced linguistic processing.

Despite being as helpful as its conclusions, previous research has primarily examined conjunction use in written language, with conversation production—especially in real-time academic and professional contexts—receiving less investigation (Zhang et al., 2022). In particular, Iranian medical students' English communicative ability is central to academic exposition and clinical interaction, but it has not been scrutinized closely. Existing scholarship (Hashemian & Soureshjani, 2011; Khoshsima & Banaruee, 2017) reports a dependence on basic coordinating conjunctions and persistent misuse with subordinators and conjunctive adverbials without describing these patterns in speech or proposing targeted pedagogical solutions.

Most prior research concentrates on written language or broad EFL populations, lacking focused analysis on spoken conjunction use in professional and academic contexts. This study bridges this gap by targeting the speaking performance of Iranian medical learners, providing empirical data on frequency, error patterns, and gender effects in real-time spoken English, contributing to more context-specific insights and pedagogical implications. Thus, this research aimed to analyze the frequency, types, and sources of conjunctions and related errors in the oral English of Iranian medical students, providing evidence for more effective teaching strategies tailored to their academic and professional needs. Consequently, this research is guided by the following questions:

1. What are the most frequently used conjunctions by Iranian medical students when speaking?
2. Is there any statistically significant difference between Iranian male and female medical students in using English conjunctions while speaking?
3. What are the most common errors in using English conjunctions among Iranian medical students while speaking?

### 3. METHODOLOGY

#### Participants and design

The present study, conducted at Iran University of Medical Sciences, employed a cross-sectional, descriptive, and comparative applied research design focused on learner-produced spoken data. This design was used to capture and report actual learner performance in spoken English within a natural academic context. Researchers examined the frequent usage and errors of English conjunctions in the spoken language of Iranian medical students. It focused on learner data, aiming to compare male and female students' usage of English conjunctions.

The initial participants were 127 non-English-speaking students chosen through convenience sampling from four different Technical English 1 classes at Iran University of Medical Sciences. Subsequently, four voluntarily withdrew from the study, leaving 123 (63 males and 60 females). Their age ranged from 20 to 21, their native language was Persian, and they were studying English as their foreign language.

It is worth mentioning that this study did not take proficiency levels into account, as upon entering the university, students need to take part in a standardized language exam, which separates them into prerequisite and general language courses. Only after passing these courses are they allowed to take Technical English 1.

## Procedure

Participants were provided with instructions and the list of five proposed topics at the beginning of the data collection phase. They were asked to choose two topics—fatty liver and asthma—for their oral presentation. To gather the data, each participant was instructed to prepare and deliver a maximum five-minute lecture divided into three main sections: signs, progression, and treatment of the selected diseases. Although no strict preparation time was imposed, students were advised to prepare their speeches in advance to ensure clarity and coherence.

Participants recorded their presentations individually in a quiet environment of their choice, such as at home or in a private room, using smartphones or other audio devices. They were instructed to submit their recordings via Gmail, Telegram, or WhatsApp within the designated timeframe.

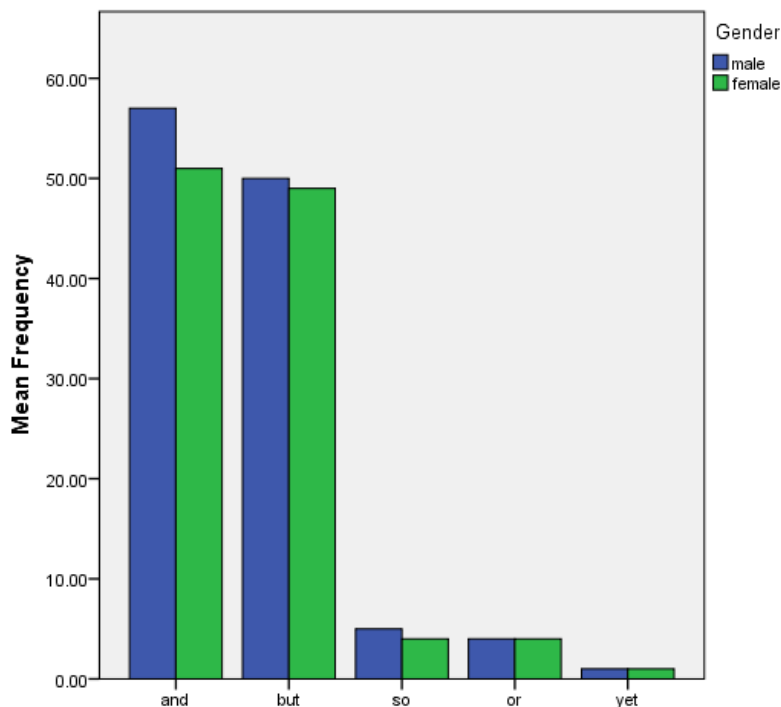
All audio recordings were transcribed verbatim by the researchers. To ensure reliability, two independent transcribers reviewed a subset of the recordings for consistency, and discrepancies were resolved through discussion. The transcriptions were then systematically analyzed for errors related to the three types of conjunctions: coordinating conjunctions, subordinating conjunctions, and conjunctive adverbs.

## Statistical Analysis

Descriptive statistics were used to analyze the frequency of the errors, and inferential statistics were employed for the statistical comparison between male and female participants, using SPSS version 22. The Chi-Square Test of Independence was conducted to examine the difference between males and females in using English conjunctions.

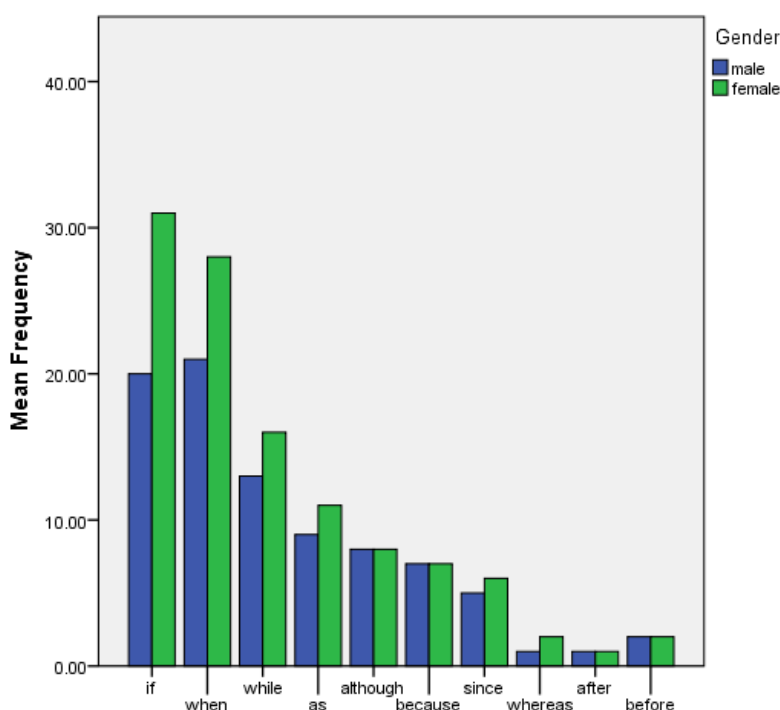
## 4. RESULTS

The first research question investigated the most frequently used conjunctions by Iranian medical students when speaking. The following figure demonstrates the use of coordinating conjunctions by the participants.



**Figure 1: Bar graph illustrating the use of coordinating conjunctions by the participants**

There are seven coordinating conjunctions (CC) known as FANBOYS, out of which five were used: and, but, so, or, yet. The conjunction *"and"* had the highest usage, accounting for nearly half of the total occurrences (47.79%), followed by *"but"* at 43.81%. The remaining conjunctions—*"so," "or,"* and *"yet"*—had significantly lower usage, collectively making up less than 10% of the total. Males used *"and"* (57 vs. 51), *"but"* (50 vs. 49), and *"so"* (5 vs. 4) more frequently than females. The conjunctions *"or"* (4 vs. 4) and *"yet"* (1 vs. 1) were used equally by both genders. The following figure demonstrates the use of subordinating conjunctions by the participants.



**Figure 2: Bar graph illustrating the use of subordinating conjunctions by the participants**

Totally, ten different SCs were used 199 times. The subordinating conjunction "if" had the highest usage, accounting for 25.63% of the total occurrences, closely followed by "when" at 24.62%. "While" made up 14.57% of the total. The remaining conjunctions—"as", "although," "because," "since," "before," "whereas," and "after"—had significantly lower usage, collectively making up about 35.18% of the total. Females used "if" (31 vs. 20), "when" (28 vs. 21), "while" (16 vs. 13), "as" (11 vs. 9), "since" (6 vs. 5), and "whereas" (2 vs. 1) more frequently than males. The conjunctions "although" (8 vs. 8), "because" (7 vs. 7), "before" (2 vs. 2), and "after" (1 vs. 1) were used equally by both genders. The following figure demonstrates the use of conjunctive adverbs by the participants.



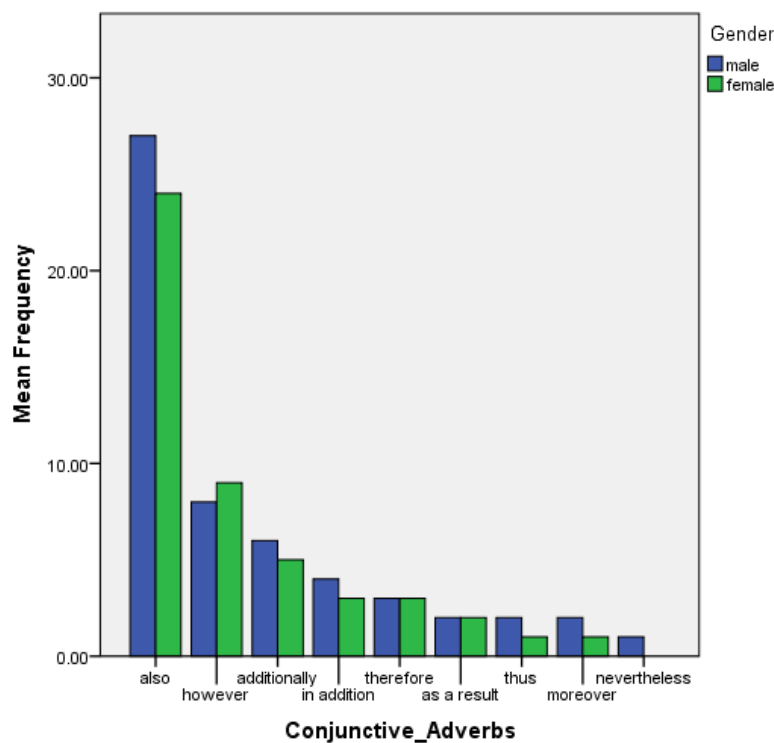


Figure 3: Bar graph illustrating the use of conjunctive adverbs by the participants

In total, nine different CAs were used 103 times. The conjunctive adverb "also" had the highest usage, accounting for 49.51% of the total occurrences. "However" followed at 16.50% and "additionally" comprised 10.68% of the total. The remaining conjunctive adverbs—"in addition," "therefore," "as a result," "thus," "moreover," and "nevertheless"—had significantly lower usage, collectively making up about 23.30% of the total. Males used "also" (27 vs. 24), "additionally" (6 vs. 5), “in addition” (4 vs. 3), “thus” (2 vs. 1), “moreover” (2 vs. 1), and "nevertheless" (1 vs. 0) more frequently than females. On the other hand, females used “however” (9 vs. 8) more than males. The conjunctions "therefore" (3 vs. 3) and "as a result" (2 vs. 2) were used equally by both genders.

The second research question investigated whether there was any statistically significant difference between Iranian male and female medical students in their use of English conjunctions while speaking. The Chi-Square Test of Independence was run to determine whether there was any significant difference between males and females regarding the use of English conjunctions.

Table 1: The Result of the Chi-Square Test of Independence for Males and Females

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square (CC)	.172a	4	.997
Pearson Chi-Square (SC)	1.185a	9	.999
Pearson Chi-Square (CA)	1.668a	8	.990

The result of the inferential test shows that there was no statistically significant difference in using CCs between males and females,  $\chi (4) = .17, p = .99$ . Moreover, there was no statistically



significant difference in using SCs between males and females,  $\chi(9) = 1.18, p = .99$ . Last but not least, no significant difference was found between males and females regarding Cas (see Table 1).

The third research question investigated the most common errors in using English conjunctions among Iranian medical students while speaking.

The analysis of errors in using English conjunctions among Iranian medical students during speaking revealed that errors were generally rare. However, certain specific patterns of misuse emerged. In three instances, students incorrectly combined “although” with “but,” demonstrating redundancy in expressing contrast. Additionally, there were two cases where students confused conditionals type 1 and type 2, mixing the structures inappropriately. Misuse of coordinating conjunctions was also evident; in two cases, students used “and” instead of “but” to show contrast, which altered the intended meaning. Beyond errors, it was also observed that students heavily relied on a limited set of conjunctions, predominantly overusing “and” and “but” as connectors. This overuse suggests a constrained variety in conjunction use despite the overall low frequency of mistakes.

## 5. DISCUSSION

Investigating the error patterns related to conjunctions by Iranian medical students reveals various elements of their proficiency in speaking English. The present research addresses a significant gap in the available literature by focusing primarily on spoken discourse, as opposed to previous studies, which mainly focused on written contexts.

Answering the first research question, the obtained results showed that students only used three types of adverbs as conjunctions including additive (“also,” “additionally,” “in addition,” and “moreover”) adversative forms (“however” and “nevertheless”) and causal adverbs (“therefore,” “as a result,” and “thus”). The least frequently used conjunctive adverb was “nevertheless,” which was only used once. This shows that upper-intermediate and advanced-level students are unfamiliar with this conjunctive adverb. This observation concurs with earlier research indicating difficulties in acquiring the subtleties of using conjunctions in a foreign language (Liu & Braine, 2005).

Regarding the second question, no statistically significant difference was found in using CCs, SCs, and CAs between males and females. They used the three types of conjunctions almost equally, meaning that the use of conjunctions is not gender-specific. The absence of gender specificity with the use of conjunctions lends credibility to the notion that proficiency is often more significant than demographic factors when it comes to conjunction use (Khoshshima & Banaruee, 2017). This study's findings are in tandem with research examining language learning outcomes, which suggests that language learning outcomes are more closely related to individual differences in terms of proficiency and use, and not necessarily to gender (Dörnyei, 2014).

The third question explored common errors faced by learners, especially the overuse of simple conjunctions, i.e., “and” and “but.” This phenomenon may be due to dependence upon habitual speech patterns, reflecting negative transfer due to interference by the learner's native language. Students are likely to use “but” alongside putting in “although.” This error requires teaching intervention. The teacher's involvement in this area plays a critical role. Teachers should engage in explicit correction and increase consciousness concerning conjunctions to diminish the tendency to repeat this error. Effective error correction strategies and raising learner awareness through explicit comparison between L1 and English conjunctions can reduce transfer errors and improve accuracy (Zewitra et al., 2023). Such a claim is supported by the Contrastive Analysis Hypothesis (CAH), which proposes that differences between a learner's native and target language may lead to learner difficulties (Lado, 1957). Further, Error Analysis (EA) emphasizes the need to

classify errors and trace them back to their causes, thereby enabling the classification of errors as those resulting from interlingual transfer or those resulting from intralingual influence or developmental processes involved in second language acquisition (Selinker, 1972).

The challenges Iranian medical students face in acquiring conjunctions can be understood in relation to some conflicting existing theories regarding language. For example, Krashen's (1982) Input Hypothesis indicates that comprehensible input is central to language acquisition. In this instance, providing students with various examples of conjunctions in spoken English can assist in their use and acquisition of these constituents. Similarly, authentic input has also been shown to be a decisive factor: language learners need a wide variety of linguistic forms in meaningful contexts to become proficient at a language (Ellis, 2015). The CAH explains many conjunction errors in EFL learners as arising from structural differences between English and their L1, which should guide targeted instructional strategies (Roa Gutiérrez, 2016).

## 6. CONCLUSIONS

This study investigated the frequency, usage patterns, and common errors in conjunction use among Iranian medical students during spoken English discourse. The findings shed light on several critical aspects of their linguistic proficiency, contributing theoretical insights and practical implications for language education in medical contexts.

The student's spoken English often reflected an overreliance on simple coordinating conjunctions, particularly "and" and "but." The preference for these simple connectors restricts the student's ability to formulate more complex and nuanced sentences, thus limiting their potential for professional interaction (Celce-Murcia, 2016). To reach a somewhat more sophisticated expression, students must experience subordinating conjunctions and conjunctive adverbs that express more complex logical discourse relations (Quirk & Crystal, 2010).

The findings demonstrated that any differences in conjunction usage by male and female students were statistically insignificant. Thus, explicit training in conjunctions is not a requisite based on gender; instead, it should prioritize areas of common difficulty for all learners, such as increasing the syntactic variety for their connecting ideas while decreasing the over-dependence on simple connectors. This fits the findings that other factors, such as language aptitude and exposure, rather than gender, are the prime correlates of language proficiency (Dörnyei, 2014).

The occurrence of negative transfer from the students' L1, Persian, was a crucial finding in this research. Evidence was provided by errors like "although, but" and wrongful conditional usage, which show how Persian structure differs from English syntax (Khoshsiman & Banaruee, 2017). These errors point to an explicit instructional approach centered on the learning problems that are being highlighted. In this context, teachers should provide direct feedback, stimulate awareness among their students, and draw explicit comparisons between English and Persian regarding conjunction use, thus helping to alleviate this error. As Lado (1957) argued, differences between the native and the target language can help reduce interference errors.

The aforementioned findings align with existing theories of second language acquisition. According to Krashen's (1982) Input Hypothesis theory, students need to be exposed to a rich and varied input of spoken English to develop their conjunctions. By offering opportunities for authentic input and contextualized practice, educators can support students in comprehending and using more complex conjunctions. Other frameworks, such as Selinker's (1972) Error Analysis framework, also offer insight into these errors as forms of interlingual transfer, intralingual overgeneralization, and developmental learning. Targeted pedagogical interventions, including explicit instruction, contrastive analysis, and focused error correction are essential for improving the conjunction use of EFL medical students (Alawerdy & Alalwi, 2022; Zewitra et al., 2023).

This study points to the necessity of direct interventions to foster Iranian medical learners' spoken English proficiency. Error correction, authentic input, contrastive analysis, and explicit instruction can create educational avenues for students to overcome challenges and develop their overall language competence. Ultimately, this will promote better communication ability for their future academic and professional needs. Future studies should explore integrating digital technology and personalized feedback tools to enhance learners' acquisition and use of conjunctions in medical English contexts (Elbashir & Hamza, 2022). Future research should seek to assess the effectiveness of a specific pedagogical approach and examine technology's role in providing individualized feedback on conjunctions.

The research focused on finding the frequent usage and possible errors among medical students while speaking, but it did not consider students' writing. Exploring writing in addition to speaking could be a valuable avenue for future research. Language proficiency is key in using cohesive devices and conjunctions; however, this study did not take proficiency levels into account. It is suggested that future research consider the role of language proficiency levels in the use of conjunctions and cohesive devices.

## 7. LIMITATIONS AND DELIMITATIONS

The use of convenience sampling and a relatively small sample size of 123 participants from only one university limits the generalizability of the findings to all Iranian medical students or other EFL learner populations. Additionally, the spoken data were collected through five-minute lectures on two predetermined medical topics, which may not fully represent students' natural spoken use of conjunctions in more diverse or spontaneous contexts. As for delimitations, the study focused specifically on Iranian medical students aged 20 to 21 whose native language is Persian, intentionally excluding learners from other age groups, educational backgrounds, or language communities to maintain sample homogeneity. Furthermore, the research targeted only three categories of conjunctions (coordinating, subordinating, and conjunctive adverbs) and did not explore other grammatical structures or modalities of language use. These scope decisions were intended to provide a focused examination of conjunction usage and errors in a defined academic speaking context.

### Conflict of Interest

There is no conflict of Interest.

### Funding

There is no funding.

### Authors' Contribution

All authors contributed equally to conducting the research and compiling the paper.

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### Declaration of interest statement

The authors declare that they have no competing interests.

## Consent for publication

Not applicable.

## References

- Al-Mahrooqi, R., & Denman, C. (2020). Assessing students' critical thinking skills in the humanities and sciences colleges of a Middle Eastern university. *International Journal of Instruction*, 13(1), 783-796. <https://doi.org/10.29333/iji.2020.13150a>
- Alawerdy, A. S., & Alalwi, F. S. (2022). Enhancing English as a foreign language university students' writing through explicit instruction of conjunctions as cohesive devices: An experimental study. *Frontiers in Psychology*, 13, 1053310. <https://doi.org/10.3389/fpsyg.2022.1053310>
- Bachman, L. (2010). Second language assessment. In *International Encyclopedia of Education* (Vol. 4, pp. 140-147). <https://doi.org/10.1016/B978-0-08-044894-7.00263-3>
- Celce-Murcia, M. (2016). The importance of the discourse level in understanding and teaching English grammar. In *Teaching English grammar to speakers of other languages* (pp. 3-18). Routledge.
- Chan, A., Darwish, R., Shamim, S., & Babar, Z. U. D. (2021). Pharmacy practice and continuing professional development in low and middle income countries (LMICs). In *Pharmacy practice research case studies* (pp. 187-205). Elsevier. <https://doi.org/10.1016/B978-0-12-819378-5.00007-6>
- Dörnyei, Z. (2014). *The psychology of the language learner: Individual differences in second language acquisition*. Routledge.
- Elbashir, R. M., & Hamza, S. M. A. (2022). The impact of virtual tools on EFL learners' performance in grammar at the times of COVID-19 pandemic. *Journal of University Teaching and Learning Practice*, 19(3), 1-18. <https://doi.org/10.53761/1.19.3.07>
- Ellis, R. (2015). *Understanding second language acquisition*. Oxford University Press.
- Flowerdew, J. (2014). *Academic discourse*. Routledge.
- Hashemian, M., & Soureshjani, K. H. (2011). The interrelationship of autonomy, motivation, and academic performance of Persian L2 learners in distance education contexts. *Theory and Practice in Language Studies*, 1(4), 319-326. <https://doi.org/10.4304/tpls.1.4.319-326>
- Heidari-Shahreza, M. A. (2018). A cross-sectional analysis of teacher-initiated verbal humor and ludic language play in an English as a foreign language (EFL) context. *Cogent Education*, 5(1), 1430474. <https://doi.org/10.1080/2331186X.2018.1430474>
- Khoshsima, H., & Banaruee, H. (2017). L1 interfering and L2 developmental writing errors among Iranian EFL learners. *European Journal of English Language Teaching*, 2(4). <https://doi.org/10.46827/ejel.v0i0.790>
- Krashen, S. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- Lado, R. (1957). *Linguistics across cultures: Applied linguistics for language teachers*. University of Michigan Press.
- Liu, M., & Braine, G. (2005). Cohesive features in argumentative writing produced by Chinese undergraduates. *System*, 33(4), 623-636. <https://doi.org/10.1016/j.system.2005.02.002>
- Nasha, L. D., & Kipkemboi, B. J. (2024). The influence of gender on English language proficiency among university students. *International Journal of Research and Innovation in Social Science*, 8(12), 1550-1559. <https://doi.org/10.47772/IJRISS.2024.8120131>
- Prator, C. H. (1967). *Hierarchy of difficulty*.

- Quirk, R., & Crystal, D. (2010). *A comprehensive grammar of the English language*. Pearson Education India.
- Roa Gutiérrez, S. (2016). *Assessing L1 interference on English spelling among Spanish EFL students* Universidad de Valladolid]. <https://uvadoc.uva.es/handle/10324/18914>
- Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics in Language Teaching*, 10, 209-241. <https://doi.org/10.1515/iral.1972.10.1-4.209>
- Zewitra, Z., Bakhti, K. Y., & Ramadhan, M. S. (2023). EFL learners' tendency in using conjunctions in writings: Evidence from English diploma-III students. *PROJECT (Professional Journal of English Education)*, 6(4), 705-713. <https://doi.org/10.1515/iral.1972.10.1-4.209>
- Zhang, L., Sun, S., & Yao, S. (2022). Error types of and strategies on learning Chinese connectives: A study on Chinese as a second language learners' writing. *Frontiers in Psychology*, 12, 790710. <https://doi.org/10.3389/fpsyg.2021.790710>