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Assessing undergraduate students' performance in simultaneous interpreting: A qualitative analysis of accuracy, fluency, and language quality

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ABSTRACT

While the subject of simultaneous interpreting (SI) has attracted substantial interest in cognitive and professional literature, much less research effort has been devoted to the examination of the quality of English-Arabic SI performance of undergraduate trainee interpreters using systematic quality assessment frameworks. This study seeks to address this gap by investigating the performance of fourth-year undergraduate translation students at Yarmouk University through an examination of the strategies they use to cope with the linguistic and cognitive complexities of English-Arabic simultaneous interpreting. It uses a corpus of recordings of interpreting performances conducted in an interpreting laboratory, specifically set up for this purpose, and applies qualitative content analysis to identify the quality problems of trainee interpreters and the strategies they adopt regarding accuracy, fluency, and language quality. The results show that the most frequent strategy is that of omission, indicating that novice interpreters tend to sacrifice completeness of the interpretation to message continuity when the cognitive complexity surpasses their cognitive resources. Substitution and simplification are commonly used as strategies to maintain the communicative intention when the vocabulary retrieval problem emerges, while addition is used from time to time to clarify some implicit information in the source text. Hesitation, repetition, and self-correction constitute fluency-coping strategies, while the widespread problem of literal transfer shows that producing natural Arabic target text remains problematic. Such findings demonstrate the applicability of the MQM framework for interpreter evaluation in an educational context and contribute to the empirical knowledge about the performance problems novice interpreters face in English-Arabic simultaneous interpreting.

KEYWORDS: communication competence, simultaneous interpreting, interpreting quality assessment, undergraduate interpreter training, cognitive processing in interpreting, English-Arabic interpreting

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1. Introduction

Simultaneous interpretation (SI) is undoubtedly one of the most cognitively challenging tasks within human interaction involving languages. SI requires interpreters not only to understand, analyze, and produce oral discourse in a target language but also to perform all these operations simultaneously with continuous exposure to source language discourse, which entails the simultaneous activation of auditory processing, working memory, syntax analysis, lexis search, and speech generation processes, which cumulatively place heavy strain on mental resources (Gile, 2017; Pöchhacker, 2022). Such cognitive complexity explains the high interest in SI by researchers from various disciplines and why SI performance serves as the benchmark of advanced interpreter training. In interpreter training programs, SI is usually introduced as the final stage of interpreter skills development after consecutive interpretation and sight translation skills are acquired (Setton & Dawrant, 2016; Yan, 2019).

In the context of undergraduate education, this learning pathway is further confounded by the nature of the learner's development, as novice trainees entering SI training are likely to possess relatively low bilingual automaticity, less robust subject-related knowledge, and less developed strategic competencies compared to postgraduate/professional learners (de Brito Lima et al., 2022; Liu, 2022). Indeed, in the context of the Arab world, where the formal education of undergraduate interpreters represents a relatively new phenomenon, the above factors are further compounded by the typological differences between Arabic and English, including in terms of morphological differences, word order, and discourse cohesion, which in turn impose an additional cognitive load on the interpreter, affecting both accuracy and fluency (Aal-Hajiahmed, 2022; Alzamil, 2023). There are three main overlapping gaps that justify the need for the current research. Firstly, the empirical research in the domain of SI performance has been mainly concerned with professional conference (Xing, 2025) and postgraduate interpreters in training (Alwazna, 2023; Orlando, 2019). The role of undergraduates studying Arabic-English translation as a discipline remains relatively understudied. Secondly, the existing research has concentrated on measuring such parameters of SI performance as accuracy, fluency, and language quality as independent variables, failing to see the interactions between these aspects. Finally, qualitative methodologies used in SI assessment have received rather limited attention in the pedagogical literature.

Previous research has addressed diverse aspects of language, translation, and interpreting, including linguistic competence, translation quality, audiovisual translation, AI-assisted translation, and cross-cultural communication, providing valuable insights into the assessment of language performance and communicative effectiveness (Aburahme, 2021; Al-Darabee & Farghal, 2025; Al-Momani et al., 2025; Alquda et al., 2025; Alqudah, 2025; Ammari & Al-Ahmad, 2023; Darwish et al., 2025; Fraihat, 2024; Gwasmeh M et al., 2026; Haider et al., 2026; Hammouri, 2025; Ja'afreh, 2023; Meqdad et al., 2023; Naib, 2025; Tannous & Haider, 2025).

This research attempts to fill the identified gaps in knowledge by conducting an analysis on the SI performance of fourth-year undergraduates from the Department of Translation at Yarmouk University (YU), Irbid, Jordan, for the second semester of the academic year 2025/2026. Fourth-year undergraduates constitute the most advanced group among all the other groups in the program because they have already covered the whole curriculum, including consecutive interpretation, sight translation, and specialized translation.

Arabic interpretation is seen as challenging by most interpreters, rendering this direction especially vulnerable to inaccuracies and linguistic deficiencies in the event of cognitive overload. In this research, the use of audio recordings of tested SI performances is employed in order to study the way students handle three key aspects of performance quality – namely accuracy, fluency, and language quality – as well as their interplay in authentic output. The selection of a qualitative research method is motivated by the need to provide an interpretation-rich analysis of contexts related to SI teaching and learning at YU and other Arab universities.

The study aims to answer the following questions:

1. What level of accuracy can be found in the interpretation of source-language material into Arabic by fourth-year simultaneous interpretation students in the Department of Translation, Yarmouk University, especially concerning omissions, substitutions, and additions when carrying out simultaneous interpretation?
2. Which features of fluency and which linguistic patterns can be identified in the students' Arabic

simultaneous interpretation, and what does the presence of hesitations, breaks, changes in grammar structures, and the impact of source-language in the process indicate regarding the process of simultaneous interpreting?

3. How do the three variables (accuracy, fluency, and language) interrelate in the simultaneous interpretation by undergraduate students?

2. Literature Review

2.1. Cognitive Foundations of Simultaneous Interpreting

The theoretical analysis of SI has undoubtedly been influenced significantly by the work of some scholars (see Gile, 2009, 2015; Gillies, 2024), particularly his Effort Model, still considered the single most cited cognitive model in the literature. Gile postulated that SI was comprised of four simultaneous efforts—Listening and Analysis (L), Memory (M), and Production (P), along with an additional Coordination Effort (C). Given the finite nature of the overall cognitive capacity of the interpreter, which is often stretched to its limit, an increase in the demand on any particular effort will likely result in errors or failures of performance in another. The ‘tightrope’ view has empirical support in studies that have found increased error and omissions associated with higher speech rates and levels of information density and lexical complexity of source texts (Gile, 1991; Pym, 2022). Due to the lack of the automatized competence of professional interpreters in allocating effort among the tasks involved, such capacities will be exhausted even more quickly for novices, resulting in more and more serious lapses in performance—exactly what can be expected from students of interpreting.

Complementary theories have also been proposed by some scholars (see Gallai & Alves, 2025; Setton, 1999), who described the management of propositional and pragmatic information in interpretation from the viewpoint of relevance theory, and by Chernov (1994), who highlighted the importance of probabilistic prediction for decreasing cognitive load. Moreover, brain imaging studies have found that professional interpreters demonstrate unique patterns of activity in prefrontal and parietal regions compared to bilingual non-interpreters, indicating that SI instruction results in lasting changes in language-specific neural structures (Chan, 2015; Elmer & Giroud, 2023; Kogan & García, 2024). From the perspective of the current study, the Effort Theory serves as the main explanatory framework due to its central hypotheses regarding novices’ susceptibility to effort mismanagement.

2.2. Quality Dimensions in Simultaneous Interpreting: Accuracy, Fluency, and Language Quality

Research into SI quality has produced lively debates among normative, user-based, and research-based approaches. Within this variety, there are three elements that have always played an integral role, namely accuracy, fluency, and target language quality (Macías & Zwischenberger, 2021). These are the central factors considered by Pöchhacker (2022), when analyzing the SI product and the basis for Setton and Dawrant (2016) SI training model. Yet, these are not entirely independent: the excessive Listening and Analysis Effort causing errors in accuracy will also affect Production, thus decreasing fluency and target language quality (Setton & Dawrant, 2016).

As indicated by the classification of some scholars (see Cox & Salaets, 2019; Popović, 2018), accuracy studies have found that omission is the most common form of departure from the source text information, with substitutions coming second, followed by additions. The occurrence of omission errors increases with the difficulty of source texts, and omission errors are also more common among novices compared to professionals (Mankauskienė, 2018; Pochhacker, 2015), since less experienced interpreters are more likely to compromise on accuracy in order to preserve linguistic continuity. As for English into Arabic translation in particular, another challenge that students face in relation to accuracy lies in the fact that the two languages differ typologically in terms of the default order of verb-subject-object construction, morphological complexity, and NP constructions. Fluency studies have shown that prosody and delivery elements exert an independent effect on perceived quality of interpreting performance. Yang (2019), for example, has conducted experiments showing that monotonicity in intonation lowered quality scores even when propositional accuracy was controlled for—a result which bears immediate relevance to the evaluation of student interpreting performance. Hesitation markers (fillers, false starts, repetition, and self-repair) act as surface manifestations of the cognitive effort required to produce speech, arising from the obstruction of lexical access and syntax construction by the production effort. Given

the grammatical complexity involved in Arabic production under dual-task constraints—which involves fast root, pattern, and agreement calculation—it is natural that fluency deterioration becomes especially problematic in the English-to-Arabic mode (Alsulaiman, 2022).

Quality in language use refers to grammar accuracy, appropriate lexicon use, and style consistency in the output produced in the second language. Due to heavy cognitive load, language use in bilingual individuals exhibits a common pattern of linguistic simplification, accessibility-driven lexicon use (favoring frequent over less frequent items), and source language interference (Llach, 2011). As far as undergraduate students in the process of acquiring an academic register in the Arabic language are concerned, the phenomenon of register and lexical mixing is an expected outcome of degraded language quality supported by a theoretical framework. Studies in SI in Arabic-English have shown that calquing, code-switching, and syntax transfer are common features of student production (Al Hayek, 2016; Kanwal, 2025).

2.3. Assessment of SI Performance in Educational Contexts

The examination of the performance of interpretation in educational contexts has produced its own methodological research focusing on validity, reliability, and pedagogic relevance. Sawyer (2004), basing his analysis on the linguistic testing theory formulated by Bachman and Palmer (1996), claims that interpretations must be based on a clear construct definition and that such tests must be both construct valid and content valid. The use of analytic rating scales, where each criterion is examined individually, has been recommended for formative purposes due to the fine-grained nature of the feedback they allow (Setton & Dawrant, 2016). The issue of inconsistency among the judges when calibrating rating criteria and giving various weights to particular parameters has been recognized in numerous scholarly studies (Pöchhacker, 2022). The use of qualitative methods can mitigate this problem because they provide clear analytical criteria for assessment.

The importance of promoting not only the quality of interpreters' output but also the self-regulation and metacognitive skills of students is becoming increasingly obvious in relation to formative assessment practices used in interpreter training. For example, studies demonstrated that the implementation of self-assessment techniques, as well as the practice of critical listening, helps students identify their own performance profiles. Furthermore, the need for peer assessment in addition to instructor assessment is explained by its ability to provide more varied feedback than the latter. According to recent research on the topic, peer assessment contributes to building the confidence, reflective skills, and goals of undergraduate interpreters. Thus, the results of the current research can be applied to developing these formative practices in the context of the YU Translation Department.

2.4. Undergraduate Interpreter Training in Jordan and the Arab World

The field of undergraduate interpreting training within the Arab region is still quite new in the world of academia, arising as it does from the increased need for professional interpreters in government, diplomacy, media, law, and international communications contexts (Taibi, 2014). There are also some public universities in Jordan that provide BA programs in writing, translation, and interpreting, namely, Yarmouk University, University of Jordan, and Jordan University of Science and Technology. The Department of Translation of Yarmouk University, established in 2008/2009 and being the first ever department of translation in any public university of Jordan, and providing BA and MA programs in translation, constitutes the subject matter of the current study (Khoury, 2017).

2.5. Three specific gaps in the literature that will be addressed through this study are identified. First, SI performance by undergraduate students in Jordan and other Arab countries has received very little attention until now. The existing literature has largely concentrated on professional interpreters and graduate students. Second, although there have been many studies on accuracy, fluency, and language quality in relation to interpreting performance, these dimensions have seldom been considered as related factors in the same study. Finally, qualitative methodologies have not been fully exploited in the interpretation field due to their potential for exploring cognitive and strategic processes in interpreting that quantitative methods cannot capture.

3. Methodology

3.1. Research Design

The current study employs the qualitative descriptive research method in order to examine the interpretation performance of university students in simultaneous interpretation from English to Arabic. Qualitative research was chosen since it permits an in-depth analysis of the interpreting performance without resorting to numerical scores, especially when it comes to linguistic, communicative, and cognitive aspects of simultaneous interpreting activities. Specifically, this research is limited to three fundamental dimensions of interpreting: accuracy, fluency, and language quality.

In this case, the research is based on a performance assessment framework wherein the interpreting tasks conducted by students will be assessed according to the criteria set in an analytical rubric. The rubric is based on research done on interpreting quality assessment and pedagogical techniques for teaching interpreting. Several evaluation criteria used in interpreting research, such as accuracy of message transmission, fluency of presentation, coherence, grammatical competence, pronunciation, and target language appropriateness, are included in the assessment tool. Furthermore, the study uses an error analysis method to evaluate recurring errors made by the students during interpretation. These errors are classified into omission, addition, substitution, incorrect lexical selection, and mistranslation. This way, the researcher can conduct an analysis of the problems experienced by students in processing the source language messages and interpreting them into the target language in real-time settings.

3.2. Research Context and Participants

This study was conducted at the Department of Translation in Yarmouk University within the framework of simultaneous interpreting classes, which are offered for senior translation students. Simultaneous interpreting tasks were carried out in realistic classroom settings where students performed simulated simultaneous interpreting conditions. The participants included undergraduate students taking simultaneous interpreting classes during the academic year of 2025/2026. The purposive sampling method was utilized to choose students who have already taken pre-interpreting courses with basic interpreting skills and bilingual transfer ability.

The participants were about 26 fourth-year students who were studying the English-Simultaneous Interpretation Course. The use of fourth-year students as participants is justified by the fact that they are in their last year of undergraduate studies, and they should have an excellent level of bilingualism and interpreting skills. Interpreting assignments consisted of speeches on political, educational, environmental, and diplomatic topics in English. Such speech genres were chosen deliberately as they have different degrees of lexical density, rhetoric, jargon, and cognitive complexity. It allowed for a more comprehensive assessment of interpreting skills. The students were asked to translate these speeches simultaneously from English into Arabic, and their interpretations were recorded and transcribed later. Participants' participation was voluntary and conducted in an ethical way.

3.3. Data Collection

Data were gathered using a sequence of classroom-based simultaneous interpretation activities carried out in the interpreting laboratory located at the Department of Translation at Yarmouk University. The interpreting lab offered a semi-professional environment for simultaneous interpreting activities, which was fitted with audio systems, microphones, headsets, and interpreting booths, allowing the students to carry out their interpreting activities under semi-professional conditions. Speeches for interpretation varied between one and three minutes long, spoken in authentic English at the normal speed of speech. These included speeches on politics, climate change, education reforms, humanitarian problems, and diplomacy, as these subjects included different amounts of lexical density, rhetorical elements, and terminology needed for interpreter training purposes.

Throughout the interpreting classes, students listened to the source speeches through the audio system of the laboratory and interpreted the speeches orally in Arabic. All interpreting activities were recorded in digital form through the interpreting laboratory facilities. The next step was transcription of interpreting performance, during which all pauses, repetitions, hesitations, incomplete utterances, and self-corrections were captured to present a complete account of students' interpreting skills. After the collecting stage, the data were analyzed qualitatively by evaluating them based on an assessment rubric for the three main criteria of interpreting

performance, namely accuracy, fluency, and language proficiency. Furthermore, types of interpreting errors were classified as omission, addition, substitution, lexical errors, and mistranslation.

3.3. Data Analysis

Qualitative error analysis, along with the interpretation quality assessment, based on the MQM model, was employed to analyze the collected data. The MQM model was used since it offers a comprehensive and systematic approach for measuring and interpreting performance, linguistic transfer, communication effectiveness, and interpreting errors among bilinguals. In particular, the following three primary components of simultaneous interpreting quality, which served as the main research variables of the present study, have been evaluated by means of qualitative error analysis and MQM-based assessment procedure: accuracy, fluency, and language quality.

In the process of analysis, the interpreter's performances were transcribed and then matched against the original source speech in order to enable source-to-target comparative analysis. The transcription incorporated elements of hesitations, pauses, repetition, repair, incomplete sentences, and lexical substitution in order to take into account not only the linguistic but also the cognitive aspects of simultaneous interpretation performance. The students' interpretations were then analyzed using the MQM-based system and categorized into different types of accuracy, fluency, and language quality according to specific categories of analysis developed based on the MQM framework. Accuracy analysis considered faithfulness, meaning transfer, speaker intention preservation, and information completeness. Fluency analysis was concerned with smoothness, flow, pace, hesitation management, pronunciation, and public speaking ability.

Apart from the primary factors that were used for assessment purposes, the mistakes made during interpretation were classified into omission, addition, substitution, incorrect lexicon usage, and mistranslation. Such classification helped the researcher recognize recurring challenges that appeared during interpretation and determine how much cognitive stress affected the students' ability to interpret in real time. Special focus was placed on cases of semantic losses, source language influence, grammar disruptions, lexical access issues, and coherent interpretation problems. Interpretation examples performed by students were provided and discussed to show common interpreting problems and effective approaches to interpretation.

3.4 . Analysis and Findings

This part includes a qualitative analysis that aims to scrutinize the performance of fourth-year translation students in simultaneous interpreting (SI). The study takes into account an assessment tool based on the concept of Multidimensional Quality Metrics (MQM). This study will take into account three main dimensions, namely accuracy, fluency, and language quality, as they enable one to understand the way in which students dealt with bilingual transfer during simultaneous interpretation. More importantly, the present study will pay special attention to some specific phenomena, including omission, substitution, hesitation, deviation from grammar, and interference of the source language, as these phenomena can help in understanding the difficulties that students face while practicing SI.

Table 1. Accuracy-Related Errors in Students' SI Output

No.	Source Text (ST)	Student Output (TT)	Error Type
1	"The government introduced economic reforms last year."	"بتاحالصإ تموكحل اتمدق"	Omission
2	"The committee approved the proposal."	"جارتقالا قنجلال تشقان"	Substitution
3	"The project requires sustainable solutions."	"لولح لىل اجاتحي عورشمل" قمةئاد	Substitution
4	"The conference begins tomorrow."	"ادغ يلودل ارمؤملا أدبيس" اخابص	Addition
5	"The organization provides humanitarian aid."	"تادعاسم قمنملا رفوت"	Omission

It is evident from the samples provided in Table 1 that omissions were the most frequent manifestation of inaccuracy observed in the interpreting performance of the students involved in this research. More specifically,

students would often omit modifiers, temporals, and descriptions while interpreting complex informational texts within the time limits set for them. This indicates that university-level interpreters would generally prefer the communication of the key message at the expense of some additional semantic features. This tendency can be explained by the nature of simultaneous interpreting itself, namely, the limitations of its cognitive process. The analysis also shows that both substitution and addition appeared to be used by students as a means of compensating for their inability to retrieve lexical items and comprehend the source message completely. In substitution errors, semantic accuracy was generally compromised through the use of general terms in place of specific words or expressions. In addition, additions appear to have been a result of over-explaining or anticipating the meaning of the source language message. While some additions helped in enhancing the coherence of the target language message, others contained information that was not found in the source message, thus altering semantic accuracy.

Table 2. Fluency-Related Features in Students' SI Output

No.	Student Output	Fluency Feature
1	"...تررق قموكحل...ينعي"	Filled pause
2	"...تنلع قموكحل قموكحل"	Repetition
3	"...يلع قافتال مت...عيقوت مت"	False start
4	"...يلالع اداصتقال...مم"	Filled pause
5	"...يلع نوجاتحي...جاتحي بالطلا"	Self-correction

As can be seen from the examples included in Table 2, the presence of hesitation phenomena was one of the major characteristics of simultaneous interpretation by university students. Hesitations were often observed during segments requiring syntactic processing or fast speech delivery. In the authors' opinion, hesitations are not necessarily indicative of any deficiencies in the linguistic skills of the students; rather, they represent moments when the interpreter is burdened by a number of different tasks performed at once.

Moreover, it is clear from the results that students used repetition and self-correction as coping strategies to sustain the flow of speech while addressing the issues of processing. Through repetition, interpreters could keep their position without experiencing any pause, whereas self-correction was an indication of continuous monitoring of the process of interpreting. However, an overwhelming number of fluency breakdowns had negative implications for the quality of target language speech. The data presented can be explained within cognitive approaches to interpreting that identify a connection between fluency breaks and processing limitations.

Table 3. Language Quality Issues in Students' SI Output

No.	Student Output	Correct/Preferred Form	Issue Type
1	"...رارقال نلع قموكحل"	"...رارقال تنلع قموكحل"	Grammatical error
2	"مدقت عنص"	"امدقت زرح"	Source-language interference
3	"اباطخ يطع"	"اباطخ يقل"	Lexical interference
4	"...رمتمل يف كراشي بالطلا"	"...رمتمل يف نوكراشي بالطلا"	Grammatical error
5	"اغامت ج لمع"	"اغامت ج دقع"	Source-language interference

As shown in Table 3, the results obtained from the sample data confirm that there is a significant impact on the quality of language used by the students in simultaneous interpretation owing to grammar and the interference of the source language. The instances of agreement, inappropriate collocations, and literal lexical translation from English into Arabic were observed in the renditions of the students, especially when interpreting difficult passages. It seems that the students tended to focus more on meaning transfer than grammar and style of language.

In addition, the data reveal the significant impact of source-language interference in the selection of lexis and grammar. The presence of translationese in the form of expressions like "مدقت عنص" and "اغامت ج لمع" reveals that the students used source language syntax extensively due to the lack of sufficient time to process the information in the target language. This observation confirms earlier investigations in the field of interpreting suggesting that cognitive strain increases the possibility of using literal translation and language interference.

In general, the outcomes reveal the necessity of developing interpreter training programs focusing on the development of cognitive skills and reformulation techniques.

4. Discussion

It can be seen from the results of the current study that the SI of the participants was highly dependent on the interaction between cognitive processing challenges and bilingual transfer competence. The prevalence of omissions in the corpus of interpreting samples suggests that there were significant difficulties for students in keeping their semantic transfer intact while simultaneously engaging in listening, comprehension, memory, reformulation, and target language production. These results provide solid evidence for a number of recently developed cognitive models of interpreting that define SI as an exercise of allocating resources due to the limitations of one's attention. There are also recent studies suggesting that novice interpreters tend to omit less prominent information when the cognitive load becomes heavier due to the rapid processing of linguistic input or complex syntax. They were in line with Pan and Seeber (2026).

Further, the analysis revealed that substitution errors tended to occur when the students faced lexical retrieval issues or came across new terms during their interpreting practice. In such cases, students tended to use lexemes that were semantically related to the original ones in order to maintain the continuity of their speech. Such behavior is typical of novice interpreters, as suggested by the current interpreting studies. Current interpreting studies indicate that novice interpreters tend to focus on efficiency and continuity in their speech rather than on lexical accuracy, especially when under cognitive strain, as noted by (Zhong & Dong, 2024) in their work on cognitive control in simultaneous interpreting. The results obtained in the current study support the aforementioned findings, as many lexemes substituted in the source texts maintained the overall meaning of the message but lacked specific semantic and pragmatic features (Wen & Dong, 2025).

In regard to fluency-related observations, it was found that hesitations, repetitions, false starts, and self-repairs were among the main features of students' SI production. In particular, these kinds of disfluencies became especially evident when students had to deliver source texts quickly, employ complicated syntactic structures, or process dense information. As recent empirical studies in the field of interpreting have highlighted, fluency issues are highly related to working memory overload and competition for attention while carrying out processing activities (Chmiel et al., 2024; Janikowski & Chmiel, 2025). The results of the current study seem to confirm this point of view since it became clear that students made use of filled pauses and repetitions as temporal management techniques that helped them keep speech flowing despite processing incoming information. It should be stressed that the results obtained imply that disfluencies might be seen not only as performance weaknesses but also as evidence of cognitive monitoring and online reformulation on the part of novice interpreters.

In addition, the results regarding language quality demonstrate the considerable influence of source-language interference on the production of Arabic by the participants. Instances of literal lexical transfer, unnatural collocation use, and syntactic imitation of English structures were evident in the data. This implies that the students tended to rely on source-language structures due to the constraints posed by high levels of cognitive load that prevented them from engaging in deeper reformulation in the target language. Recent studies in bilingual processing and interpreting skills have reported similar findings in which source-language interference was found to be more common in instances where interpreters faced increased cognitive load or reduced processing time (Zhang, 2025).

Another significant contribution made by the current study is the illustration of the interplay between accuracy, fluency, and language quality. Indeed, it was observed that students aiming to keep their speech fluent were prone to making use of omission and simplification techniques, while those trying to ensure semantic completeness were likely to produce disfluent speech. In a similar fashion, students aiming at maintaining sophisticated grammatical structures in Arabic had to take some time before starting to speak, thus increasing the frequency of pauses. These results corroborate recent models of interpreting competence, which posit that SI proficiency can be viewed not as an attempt to optimize all performance dimensions simultaneously but as a constant cognitive prioritization process (Pastor, 2026).

In terms of pedagogy, the results emphasize the need for introducing the training methods based on the principles of cognition into interpreter training at the undergraduate level. Language-based teaching techniques

seem inadequate to meet the challenges posed by SI. Current studies related to interpreter training have shown that developing anticipatory processing, chunking, memory coordination, paraphrasing ability, and cognitive flexibility play a crucial role in interpreter training (Li, 2024) on interpreter training and cognitive development. In this respect, the findings of this research provide strong evidence for the necessity of such pedagogical orientation in that most of the problems faced by students were associated with cognitive management issues rather than language-related challenges.

5. Conclusion

This research focused on the SI skills of university students in relation to three interrelated factors: accuracy, fluency, and language quality. The results revealed that the students' SI output depended on the ongoing balancing act of meaning transmission and the cognitive limitations that arise from bilingual processing in real time. Issues related to accuracy were mostly observed in terms of omissions, substitutions, and sometimes additions, which implies that students often had to resort to selective transfer and simplification in order to ensure continuity of interpretation. This implies that the SI tasks of university students are performed under considerable processing pressure.

In addition to this, it was found that fluency should not be seen as a measure of ease in speaking but, rather, as a marker of cognitive resource allocation. The presence of hesitation, repetitions, false starts, and self-repairs in the speech of students was observed to indicate times of increased cognitive effort and not a lack of language proficiency. Likewise, language quality assessment results showed that grammatical errors, inaccurate use of vocabulary, and interference from source languages were more evident when the students tried to cope with comprehending and delivering at the same time.

In terms of theory, the research makes a contribution towards the interpretation of research through expanding qualitative research into the understudied field of simultaneous interpreting of English and Arabic at an undergraduate level in Jordan. Contrary to past research that has been focused on examining one particular aspect of interpreting or has used a predominantly quantitative approach to measuring interpreting, this research has taken a multidimensional approach that considers the interplay between language production and cognitive management.

From a pedagogical point of view, this study implies some consequences for interpreter education and training. It is necessary to stop concentrating solely on language skills in undergraduate SI teaching and integrate anticipation training, paraphrasing, chunking, memory coordination, and cognitive flexibility into the curriculum. Perhaps developing the skill of handling simultaneous processing will lead to improvement both in terms of semantic accuracy and fluency and target language competence. Further research might use the results of this study and include more participants, compare various languages and levels of proficiency, and employ process-oriented techniques like eye tracking and retrospective protocol analysis.

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