

## Chinese college EFL students' perceptions towards online English listening comprehension assessments in the post-COVID era



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### ABSTRACT

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This study investigates Chinese college English as Foreign Language (EFL) students' perceptions and challenges in online English listening comprehension assessment in the post-COVID era. A quantitative approach was employed to examine students' perceptions and their challenges in online English listening comprehension assessment. A 5-point Likert scale questionnaire including sections of background information, perceptions and challenges was administered to 138 undergraduates and 125 postgraduates in China. Participants are EFL learners who have experience with online English listening comprehension assessments. The collected data were then analyzed using descriptive statistics and independent sample t-tests. The results showed that undergraduates and postgraduates positively perceived the benefits of online listening assessments in general with the main challenges encountered being time pressure, technical difficulties, and anxiety. Additionally, the findings indicated that no significant differences between undergraduate and postgraduate students in terms of their perceptions and challenges faced. This study recommends teachers leverage the flexibility and immediacy of online assessments to enhance learning outcomes to provide more effective pedagogical support and technological solutions. However, challenges like time pressure and technical support still need to be addressed.

**Contribution/ Originality:** This study addresses a gap in research on online English listening comprehension assessment focusing specifically on Chinese college students. It uniquely contrasts undergraduate and postgraduate perspectives highlighting shared and distinct challenges. It offers novel insights for balancing assessment flexibility with solutions to challenges like time constraints and technical issues.

### 1. INTRODUCTION

Language assessment is an important ingredient in the entire language learning process. The impact of assessment on teaching and learning in language study has received much attention in the past literature (Fitriyah & Jannah, 2021). Language assessments and tests in English classes not only aim to gauge the progress and achievements of students' English language studies in different stages but also aim to monitor and evaluate a student's learning development throughout the teaching process (Heritage, 2007). Nowadays, English language assessment is viewed as a crucial and fundamental component of the effective learning environments in English teaching which will engender positive influence on helping students improve their thinking and learning skills

(Bransford, Brown, & Cocking, 2000; Tran & Ma, 2021). Nonetheless, in the era of the pandemic, the format of English language assessment has changed. Since the pandemic has exerted a profound influence on global development in all fields, online assessment has become more popular than ever. The advancement of information and communication technologies (ICT) has created new opportunities for students to engage in technology-enhanced assessments through computers, laptops, or mobile devices (Atmojo & Nugroho, 2020; Eri et al., 2021; Nguyen & Nguyen, 2021). Technology-enhanced language assessment is proved to be the practice of creating, delivering, scoring, and analyzing language tests using digital tools and technological platforms (Shadiev & Yang, 2020). This method uses a number of technologies to increase the efficacy, validity and reliability of language testing and assessment. Additionally, online assessments not only streamline the evaluation process but also provide access to tools unavailable in face-to-face settings (Benson & Brack, 2010; Fitriyah & Jannah, 2021). This allows for a greater variety of assessments that can capture a wider range of skills and attributes that traditional methods may struggle to evaluate effectively (De Villiers, Scott-Kennel, & Larke, 2016; Kundu & Bej, 2021).

The technology-assisted methods have always been adopted to support English listening skills assessment. For example, the recorded tapes of listening materials are an effective way to provide authentic speech to learners (Zahra, Khan, Ahmed, & Aziz, 2023). In the post-COVID era, the use of technology-based methods has extended to the entire process of English listening assessment, namely online listening assessment which includes delivering, scoring and giving feedback. However, the effectiveness of listening assessment depends on indicators like authentic listening materials and language environment, the form and quality of information input, and psychological factors of learners (Zahra et al., 2023). Yagang (1994) summarized that “the message, the listener, the speaker, and the physical environment” are the four sources of listening assessment problems for such a sophisticated English listening assessment standard. Ali and Hamid (2020) also pointed out that language learning is influenced by a complex of technological, political, social psychological and data-driven accountability factors in which assessment and teaching are rooted. Therefore, the feasibility and learners’ acceptance and adaptability of online listening comprehension assessment need to be comprehensively examined as a technology-assisted method different from traditional paper-based assessment. Listening has been recognized as important in English teaching and learning in China, especially Chinese tertiary-level EFL education (Jiang, Chen, Lu, & Wang, 2021). However, English listening assessments in China demonstrated the disadvantages of the monotony of listening forms and the lack of authenticity of listening materials. Traditional offline English listening assessments tend to involve listening to the audio recordings of selected spoken texts designed by Chinese scholars and then answering comprehension questions by writing (Jiang et al., 2021). The programmatic characteristics of such listening assessment have resulted in a lack of freedom and flexibility in language study, failing to cultivate students’ autonomy and learning motivation. In the post-pandemic era, the constant extension of online listening assessment into English teaching systems in Chinese tertiary education has been adopted as a more flexible alternative method. However, whether online assessments can be effective are not only related to the attributes of the assessment itself but also influenced by peculiar factors like economic and cultural conditions, students’ technological abilities and learning requirements. Besides, factors like general knowledge level and average English proficiency level between different phases in Chinese tertiary education are considered to be highly correlated with the problems and difficulties of adopting the new listening assessment mode (Zhu, 2021). Therefore, further exploration is required to determine whether online English listening tests are suitable for a Chinese-specific educational environment currently.

Online assessments are effective in detecting and enhancing students’ language learning and what problems they experience while engaging in online assessments; the answer must derive mostly from students themselves. Therefore, how students perceive the role of online assessments in their language studies is valued most. This study aims to go deep into the perceptions of Chinese college EFL students towards online English listening comprehension assessment in the post-COVID era. The significance of this study lies in guiding teachers to more effectively leverage online listening assistance technologies to develop teaching plans that align with students’

needs, thereby enhancing the effectiveness of English listening instruction. Additionally, it seeks to identify the real challenges students experience during online listening assessments, providing insights into optimizing infrastructure and assessment environments for a smoother learning experience.

Two research questions will be addressed that were formulated to navigate this research as below:

- 1) What are the perceptions and challenges of Chinese college EFL students towards online English listening comprehension assessments in the post-COVID era?
- 2) Are the perceptions and challenges of online English listening comprehension assessments for Chinese undergraduate EFL learners different from those of graduate EFL learners?

## 2. LITERATURE REVIEW

### 2.1. Online English Language Assessment

The assessment of learning is always considered a pivotal component of the instructional design procedure because it allows for the enhancement of learning and teaching by providing feedback on the entire procedure (Haladyna, 2002). De Villiers et al. (2016) demonstrated learning assessment as the process by which learners' achievement and progress are measured. Assessments in education enable teachers to obtain insights about individuals' progress or the effectiveness of the curriculum and instruction and seek to improve the quality of educational provision (Banta & Palomba, 2014).

During the outbreak of COVID-19, the teachers have widely adopted an online assessment as an alternative to conventional assessment to maintain necessary social distancing. Online assessment is a form of education facilitated through the Internet to assist the evaluation of learning outcomes (Teo, Abd Gani, & Ummah, 2022). It involves teacher observations, discussions, group collaboration, and work analyses and extends beyond merely assigning scores or qualifications (Hricko & Howell, 2006). This thriving assessment method offers much more benefits than conventional assessment as it provides meaningful learning experiences and opportunities to utilize international advanced education resources (Vermeulen & Volman, 2024).

Online English language assessment is one of the key applications of technology-assisted assessment. Online English language assessment refers to the evaluation of an individual's English language proficiency using internet-based tools and platforms (Suvorov & Hegelheimer, 2013). The achievement of learning objectives in EFL learning must be evaluated using consistent assessment types and reliable instruments that disclose the students' actual level of linguistic competence (Tran & Ma, 2021). Therefore, online assessment turns into a valuable and efficient tool in English teaching owing to instantaneous and individualized feedback (Kundu, 2018, 2020) enabling students to improve their EFL learning (Saleh Alharbi, Abdullah Alhebshi, & Meccawy, 2021).

### 2.2. Students' Perceptions of Online Assessment

Numerous studies were conducted with regard to students' perceptions towards online assessment focusing on factors like different skills of English learning, regions, the impact of the pandemic and different grades of students (Tran & Ma, 2021; Vo & Nguyen, 2023). Olga and Victor (2021) carried out a study on investigating students' perceptions of the thesis proposal presentation in an online format compared with usual face-to-face presentations due to safety concerns during the COVID-19 pandemic in Moscow. The results revealed that students were exceedingly satisfied with the online format and provided new insights on the most suitable and useful oral testing approach for both students and staff. However, the results are discrepant due to the different online language assessments adopted. Vo and Nguyen (2023) investigated students' perceptions of peer assessment in a virtual English writing class in Vietnam revealing that students held negative attitudes toward its application. In contrast, the study by Tran and Ma (2021) explored the way EFL learners perceive the impact of online formative assessment in a blended listening course in Vietnam. The results showcased that students thought highly of activities for formative assessment as a flexible, personalized and user-friendly learning platform in the online

learning environment. However, none of the research delved into students' perceptions of online English listening comprehension assessment among Chinese EFL learners although listening is usually viewed as a challenging skill that more research-related is needed (Chow, Chiu, & Wong, 2018).

Furthermore, numerous studies were carried out investigating students' perceptions towards online language assessment before the pandemic or during the pandemic (Attia, 2014; Olga & Victor, 2021). For instance, Attia (2014) demonstrated that the majority of participants in the study held positive attitudes towards online assessment before the pandemic while Agung, Surtikanti, and Quinones (2020) found that most students were not enthusiastic about online learning during the epidemic. However, few research was conducted to investigate students' perceptions of online assessment on listening comprehension in the post-COVID era among EFL learners.

Additionally, some studies focus on students' perceptions of online language assessment across different grades, Grade Point Average (GPA) scores and general knowledge levels. Johnson and Palmer (2015) demonstrated that undergraduate students generally hold a positive attitude and perform well in online language assessment while students with higher GPAs gravitate towards face-to-face assessment. Attia (2014) explored that although the majority of postgraduate students have good perceptions towards online language assessment, they represented great concern about cheating and plagiarism. Limited studies were conducted to reveal the difference in perceptions from undergraduates and postgraduates with different study phases and general knowledge levels.

### *2.3. Benefits and Difficulties of Online English Listening Comprehension Assessment*

Online English language assessment has become increasingly prevalent due to the convenience and accessibility offered by online assessments since the era of the pandemic (Aina & Ogegbo, 2021; Saikat, Dhillon, Wan Ahmad, & Jamaluddin, 2021; Weldon, Ma PhD, Ho, & Li, 2021). In line with this, online English listening comprehension assessment offers great benefits for people to learn and improve their English language skills of listening comprehension while it is also rapidly followed by difficulties. Previous studies have explored students' adaptability, acceptance, and potential difficulties in implementing online listening assessments from several controversial aspects.

From the perspective of the dual nature of technology, the most evident benefits of online English listening comprehension assessment are the conveniences it provides for language learners for the reason that online tests can be taken whenever it is most convenient for the learners and can be accessed from a variety of devices and locations (Bailey & Lee, 2020; Nartiningrum & Nugroho, 2020) which increases its accessibility and flexibility. Numerous online English listening comprehension assessments provide immediate feedback, assisting students in identifying their listening skills and deficiencies (Bahari, 2021; Hsia, Huang, & Hwang, 2016; Lu & Law, 2012). While in the other aspect, the evaluation process might be hampered by a lack of technical skills due to inadequate internet access, computer issues, or platform flaws (Tran & Ma, 2021; Zarei & Mohammadi, 2022). Lack of suitable space and technological equipment as well as economic difficulties such as internet fees are also the costs brought about by technical support. Patrick (2019) stated that comprehensible input messages and authentic materials are of great significance for listening. Online English listening comprehension assessment might involve a variety of listening materials with various accents, tempos, and contexts to ensure that learners develop comprehensive language abilities (Sha, 2010). Meanwhile, it may comprise real-world audio content from conversations, newscasts or interviews (Peterson, 2010). This authenticity better prepares learners for actual language use. Therefore, students will engage actively in a flexible, personalized learning environment while effectively honing their listening skills (Tran & Ma, 2021; Xu, Huang, Wang, & Heales, 2014). However, an unfamiliar but authentic English accent and real listening materials are proven to bring critical difficulties experienced by EFL listeners in listening (Buck, 2001). In addition, when the text material in the listening assessment appears in electronic form instead of printed form, it may also cause difficulties for the examinee's reading comprehension process.

The individual differences among students determine that the impact of psychological factors on the effectiveness of online listening assessments cannot be overlooked (Martinez, 2001). Students' emotional conditions including passion, desires, competition, striving, learning enjoyment, frustration, and learning independence and learning objectives can directly affect their learning performance (Martinez, 2001). Ebadi, Amini, and Gheisari (2023) demonstrated that online listening assessment can provide a stress-relieving exam environment by offering a novel and interesting experience as well as a supportive, convenient and financially efficient language assessment journey that students have the initiative to customize the assessment for themselves. Nevertheless, Genis-Gruber and Weisz (2022) argued that students are prone to fatigue with technical tools coupled with a free examination environment which can lead to a lack of motivation and sense of responsibility when taking online listening comprehension assessments. Besides, the failure to concentrate might hinder EFL learners as they are required to process rapidly and listen to oral passages in real time with a more restricted time limitation in online assessment (Teo et al., 2022). Physical environment is one of the significant components of the problems in online listening comprehension (Yagang, 1994). Unsupervised and open book exams have become the norm for online listening tests. The stress-relieving environment and flexibility of time and location not only provide convenience but also demand better control over the exam environment. For instance, the accessibility of students to a reliable Wi-Fi or a suitable quiet room to take a remote exam has been proven to be the biggest obstacle (Alruwais, Wills, & Wald, 2018). Finding a quiet space for taking assessments has been reported to be difficult due to the noise from their families or neighbors (Clark, Callam, Paul, Stoltzfus, & Turner, 2020). Moreover, students' behavior and performance are closely related to environmental conditions. Amzalag, Shapira, and Dolev (2021) reported that some students will utilize certain gadgets to cheat on examinations which is unfair to all other students because of the lack of surveillance online and the lack of self-discipline. Since cheating and unauthorized assistance are difficult to spot, ensuring the security and integrity of online English language assessment is still demanding (Amzalag et al., 2021; Gamage, Silva, & Gunawardhana, 2020; Garg & Goel, 2022).

In a nutshell, implementing online listening comprehension assessment is not just about moving the assessment from the classroom to an online platform; it at the same time requires coordinating with detailed course plan design, suitable audio and video materials, technical support equipment and regulation of students' psychological factors and control of behavioral norms. Understanding students' perceptions and experiences is crucial for introducing these structural changes (Genis-Gruber & Weisz, 2022).

### **3. METHODOLOGY**

#### *3.1. Research Design*

This study employed a quantitative research design to investigate Chinese college EFL students' perceptions and challenges towards online English listening comprehension assessments in the post-COVID era. A survey-based approach was adopted to collect data through a structured questionnaire distributed online. The Unified Theory of Acceptance and Use of Technology (UTAUT) was chosen as the theoretical framework to guide the study which investigates the students' acceptance of online assessments (Venkatesh, Morris, Davis, & Davis, 2003). The use of UTAUT allows for the exploration of how technological factors such as technical issues, feedback, and learning environment affect students' perceptions of online assessments. These factors were measured by questionnaire items such as students' views on the learning quality, feedback, technical difficulties and motivation related to online English listening comprehension assessments.

#### *3.2. Population and Sample*

The study involved 138 undergraduate and 125 postgraduate students from Xinxiang University, Shangqiu Normal University and Central China Normal University. These students had all experienced online English listening comprehension assessments after the COVID-19 pandemic. Participants were from various majors with

English as one of their compulsory courses. Their ages ranged from 18 to 26 years and all participants were native Chinese speakers. The sampling method was convenience sampling due to the accessibility of students and the need for timely data collection. Gender distribution was random.

### *3.3. Instrument*

A questionnaire was employed to determine Chinese undergraduate and postgraduate students' perceptions of online listening comprehension assessment in the post-COVID era and the challenges they faced when conducting assessment. The questionnaire mainly refers to the study of [Iskandar, Ganesan, and Maulana \(2021\)](#) with the items has been adapted based on past research mentioned in the literature review.

Three sections were included in the questionnaire. The first section aims to collect the background information of participants and the other two sections focus on students' perceptions of online listening comprehension assessment and the challenges they face, respectively. A total of 16 items were used to explore students' perceptions regarding online assessments such as learning quality, feedback, flexibility, motivation, and technical aspects while 11 items aimed at identifying the specific challenges students face during online listening comprehension assessments such as time limitations, technical difficulties, motivation, and anxiety. Each item was rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire encompassing 27 items was shown in [Appendix 1](#).

### *3.4. Data Collection*

Data were collected using the "Wen Juan Xing" platform, an online survey tool widely utilized in China for academic research known for secure and anonymous data handling. The questionnaire was distributed to students during regular class sessions with responses gathered over two week. After data collection, the dataset was downloaded from the platform for analysis in Statistical Package for the Social Sciences (SPSS) version 29.

### *3.5. Data Analysis*

The data analysis was carried out using quantitative techniques processed on SPSS version 29. The collected data were analyzed using descriptive statistics and independent sample t-tests. The descriptive statistics included calculating the mean, standard deviation, minimum, and maximum values for each item in the questionnaire, providing a comprehensive overview of the central tendencies and variability within the responses. The independent samples t-tests were conducted to compare the mean scores between undergraduate and postgraduate students for both their perceptions and the challenges they encountered. Most importantly, the t-tests helped determine whether there were statistically significant differences between the two groups. The results of the t-tests are reported with the t-value, degrees of freedom (df), and significance level (p-value).

## **4. RESULTS**

### *4.1. Students' Overall Perceptions and Challenges Encountered in Online English Listening Comprehension Assessment*

[Tables 1](#) and [2](#) display the overall perceptions and challenges encountered by Chinese EFL undergraduate students regarding online English listening comprehension assessment. All questions were formulated in a positive manner to facilitate analysis and reporting. As depicted, a higher percentage indicates a more favorable perception among respondents or a greater challenge they face.

Table 1. Undergraduates' perceptions of online English listening comprehension assessments.

Students' perceptions of online English listening comprehension assessments					
Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Mean
35.51	48.55	14.49	1.45	0	4.18
34.78	51.45	12.32	1.45	0	4.20
33.33	48.55	18.12	0	0	4.15
34.78	51.45	13.04	0.72	0	4.20
32.61	42.75	21.74	2.17	0.72	4.04
34.78	44.93	17.39	2.9	0	4.12
31.16	53.62	13.04	2.17	0	4.14
29.71	45.65	19.57	4.35	0.72	3.99
29.71	40.58	21.01	6.52	2.17	3.89
26.09	49.28	21.74	2.9	0	3.99
17.39	36.96	36.96	7.97	0.72	3.62
24.64	39.86	31.88	2.9	0.72	3.85
20.29	34.78	32.61	10.87	1.45	3.62
17.39	20.29	36.96	23.91	1.45	3.28
21.74	30.43	39.13	7.97	0.72	3.64
26.81	52.17	20.29	0.72	0	4.05

Table 2. Challenges undergraduates faced in online English listening comprehension assessments.

Challenges of conducting online listening comprehension assessments						
Items	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Mean
1	24.64	57.25	15.94	2.17	0	4.04
2	21.47	45.65	28.26	3.62	0.72	3.84
3	14.49	44.93	28.26	10.87	1.45	3.6
4	17.39	44.2	31.89	5.8	0.72	3.72
5	15.22	40.58	30.43	13.04	0.72	3.57
6	15.22	47.83	27.54	9.42	0	3.69
7	7.25	26.81	39.13	23.91	2.9	3.12
8	10.87	19.57	40.58	23.91	5.07	3.07
9	7.97	13.77	32.61	36.23	9.42	2.75
10	11.59	27.54	35.51	22.46	2.9	3.22
11	10.14	32.61	36.96	15.94	4.35	3.28

The data collected from undergraduate students regarding their perceptions of online English listening comprehension assessments reveal several key insights. Items such as "Online English listening comprehension assessment enhances my learning quality" (mean = 4.18) "provides immediate feedback about my performance" (mean = 4.20), and "permits variable testing cycles" (mean = 4.15) have high agreement percentages (strongly agree and agree combined exceeding 80%). These high mean scores indicate a generally positive perception among undergraduates regarding the benefits of online listening assessments. Specifically, the item "Online English listening comprehension assessment is convenient and flexible" has a mean score of 4.20 with 34.78% strongly agreeing and 51.45% agreeing. This suggests that undergraduates find online assessments highly convenient and adaptable to their schedules, a significant advantage over traditional assessments. The item "Online English listening comprehension assessment motivates me to improve my English listening comprehension" also scored highly (mean = 4.12) with 34.78% strongly agreeing and 44.93% agreeing. This indicates that online assessments can play a role in motivating students to enhance their listening skills. Besides, items related to technical aspects such as "provides higher listening audio quality" (mean = 4.14) and "improves my technical skills" (mean = 3.99) also show high levels of agreement. This reflects the positive impact of technology on the assessment experience. Meanwhile, the perception that online assessments do not facilitate cheating (mean = 3.89) suggests that students believe the integrity of online assessments is maintained.

However, the item "reduces the exam stress" (mean = 3.62) shows mixed responses with 20.29% strongly agreeing and 34.78% agreeing but also a notable 32.61% remaining neutral. This indicates that while some students

find online assessments less stressful, a significant portion does not feel a substantial reduction in stress. Moreover, the item “is suitable for all students” has the lowest mean score (3.28) with a considerable portion (23.91%) disagreeing. This suggests that not all students feel online assessments are equally beneficial. Additionally, the item “is helpful for long-term memory” (mean = 3.64) shows moderate agreement indicating some uncertainty about the long-term benefits of online assessments.

The data also highlight several challenges faced by undergraduates during online listening comprehension assessments. The item “Time limitation forced me to think fast in doing the assessment” (mean = 4.04) has the highest level of agreement with 24.64% strongly agreeing and 57.25% agreeing. This indicates that time constraints are a significant challenge forcing students to respond quickly and potentially impacting their performance. The item “I face difficulty in reading the text materials in the online listening comprehension assessment” (mean = 3.84) shows that a noteworthy portion of students (21.47% strongly agreeing and 45.65% agreeing) struggle with the text materials provided during assessments that may hinder their overall comprehension and performance.

Challenges related to technical knowledge or skills (mean = 3.72) and lack of physical space or proper facilities (mean = 3.60) are significant with many students agreeing that these factors impede their ability to effectively participate in online assessments. The items “Lack of motivation” (mean = 3.57) and “Online English listening comprehension assessment makes me nervous” (mean = 3.69) highlight that motivation and anxiety are evident challenges for many students affecting their engagement and performance.

Additionally, items related to internet access (mean = 3.12) and economic challenges such as internet fees (mean = 2.75) show that a lack of reliable internet and financial constraints are barriers to effective participation in online assessments. However, only 21.74% of students felt that they faced challenges with internet fees which inversely suggest that most students have good financial support. Besides, the items “The monitoring system for online English listening assessment makes me feel anxious” (mean = 3.22) and “Online English listening comprehension assessment makes me reluctant in taking responsibility for completing the assessment” (mean = 3.07) reflect that monitoring and accountability issues can increase student anxiety and reduce their willingness to fully engage in the assessment process.

Tables 3 and 4 present the overall perceptions and challenges faced by Chinese EFL postgraduate students in relation to online English listening comprehension assessment.

Table 3. Postgraduates’ perceptions of online English listening comprehension assessments.

Students’ perceptions of online English listening comprehension assessments						
Items	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Mean
1	31.2	48.8	16.8	1.6	1.6	4.06
2	29.6	50.4	16.8	1.6	1.6	4.05
3	28	61.6	8	0	2.4	4.13
4	38.4	51.2	7.2	1.6	1.6	4.23
5	34.4	52	7.2	2.4	4	4.10
6	32	37.6	24.8	1.6	4	3.92
7	30.4	44	19.2	0	6.4	3.92
8	24	44	26.4	4	1.6	3.85
9	22.4	29.6	20.8	24	3.2	3.44
10	23.2	39.2	31.2	2.4	4	3.75
11	20.8	39.2	22.4	9.6	8	3.55
12	17.6	44	29.6	5.6	3.2	3.78
13	14.4	40.8	33.6	5.6	5.6	3.53
14	9.6	20	40.8	18.4	11.2	2.98
15	16.8	24	40.8	11.2	7.2	3.32
16	25.6	47.2	12.8	12.8	1.6	3.82



Table 4. Challenges postgraduates encountered in online English listening comprehension assessments.

Challenges of conducting online listening comprehension assessments						
Items	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Mean
1	40.8	43.2	12.8	1.6	1.6	4.20
2	20	40.8	28	5.6	5.6	3.64
3	16.8	36	25.6	20	1.6	3.42
4	20	28.8	25.6	24	1.6	3.46
5	16.8	25.6	35.2	18.4	4	3.33
6	18.4	28	25.6	12.8	15.2	3.22
7	20	28	28	12.8	11.2	3.33
8	16.8	18.4	29.6	31.2	4	3.13
9	9.6	9.6	28	36.8	16	2.60
10	14.4	22.4	28	25.6	9.6	3.10
11	15.2	29.6	35.2	12.8	7.2	3.33

The data collected from postgraduate students regarding their perceptions of online English listening comprehension assessments also provide several significant insights. Items such as “Online English listening comprehension assessment enhances my learning quality” (mean = 4.06), “provides immediate feedback about my performance” (mean = 4.05) and “permits variable testing cycles” (mean = 4.13) exhibit high levels of agreement (strongly agree and agree combined exceeding 75%). These high mean scores indicate that postgraduate students generally perceive online listening assessments positively. The item “Online English listening comprehension assessment is convenient and flexible” has a high mean score of 4.23 with 38.4% strongly agreeing and 51.2% agreeing. This suggests that postgraduates and undergraduates find online assessments highly convenient and adaptable to their schedules. The item “Online English listening comprehension assessment motivates me to improve my English listening comprehension” has a slightly lower mean score of 3.92 with 32% strongly agreeing and 37.6% agreeing. This indicates that the level of motivation may vary while a significant number of postgraduates find online assessments motivating. Furthermore, items related to technical aspects such as “provides higher listening audio quality” (mean = 3.92) and “improve my technical skills” (mean = 3.85) show positive responses, though slightly lower than undergraduates. This not only suggests a positive impact of technology on the assessment experience but highlights room for improvement. The perception that online assessments do not facilitate cheating has a lower mean score (3.44) compared to undergraduates with 24% disagreeing. This suggests that postgraduates have more concerns about the potential for cheating in online assessments.

However, the item “reduces the exam stress” has a mean score of 3.53 indicating mixed responses with 14.4% strongly agreeing and 40.8% agreeing but also 33.6% remaining neutral. This suggests that a significant portion does not perceive a substantial reduction in stress while some postgraduates find online assessments less stressful. Similarly, the item “is suitable for all students” has the lowest mean score (2.98) with 29.6% disagreeing or strongly disagreeing. This indicates that a significant number of postgraduates do not find online assessments equally beneficial for all students. Additionally, the item “is helpful for long-term memory” (mean = 3.32) shows moderate agreement indicating some uncertainty about the long-term benefits of online assessments.

This research also reveals the challenges experienced by postgraduate students during online listening comprehension assessments. Firstly, the item “Time limitation forced me to think fast in doing the assessment” (mean = 4.20) has the highest level of agreement with 40.8% strongly agreeing and 43.2% agreeing. This indicates that time constraints are a significant challenge forcing students to respond quickly and potentially impacting their performance. Secondly, the item “I face difficulty in reading the text materials in the online listening comprehension assessment” (mean = 3.64) shows that a notable portion of students (20% strongly agreeing and 40.8% agreeing) struggle with the text materials provided during assessments which may hinder their overall comprehension and performance. Moreover, challenges related to technical knowledge or skills (mean = 3.42) and lack of physical space

or proper facilities (mean = 3.46) are significant with many students agreeing that these factors impede their ability to effectively participate in online assessments.

Besides, the items “Lack of motivation” (mean = 3.33) and “Online English listening comprehension assessment makes me nervous” (mean = 3.22) highlight that motivation and anxiety are also challenges for some students affecting their engagement and performance. Items related to internet access (mean = 3.13) and economic challenges such as internet fees (mean = 2.60) show that a lack of reliable internet and financial constraints are barriers to effective participation in online assessments. Meanwhile, the items “The monitoring system for online English listening assessment makes me feel anxious” (mean = 3.10) and “Online English listening comprehension assessment makes me reluctant in taking responsibility for completing the assessment” (mean = 3.33) reflect that monitoring and accountability issues can increase student anxiety and reduce their willingness to fully engage in the assessment process.

4.2. Descriptive Analysis and Independent Samples T-Test

Descriptive statistics and independent sample tests were conducted to investigate whether the education stage influences the differing perceptions and challenges encountered by undergraduate and postgraduate students in online English listening comprehension assessments.

Table 5 showed that the mean values of undergraduate and postgraduate students’ perceptions of online English listening comprehension assessment were 3.94 and 3.78, respectively suggesting that both groups of subjects had an overall positive attitude towards this form of assessment. Undergraduate and postgraduate students had mean values of 3.63 and 3.34, respectively (see Table 6) indicating that both groups of subjects were challenged to some degree with regard to challenges regarding online listening comprehension assessment.

Table 5. Descriptive statistics of students’ perceptions of online English listening comprehension assessments.

Students’ perceptions of online English listening comprehension assessments					
Variables	N	Minimum	Maximum	Mean	Std. deviation
Undergraduates	16	3.28	4.20	3.94	0.26796
Postgraduates	16	2.98	4.23	3.78	0.33742

Table 6. Descriptive statistics of challenges students encountered in online English listening comprehension assessments.

Challenges of conducting online listening comprehension assessments					
Variables	N	Minimum	Maximum	Mean	Std. deviation
Undergraduates	11	2.75	5.72	3.63	0.7810
Postgraduates	11	2.60	4.20	3.34	0.3810

When analyzing the differences between undergraduate and graduate students in this study in terms of perceptions and faced challenges on the online English listening comprehension assessment, we found some significant trends and some results that failed to reach statistical significance (see Tables 7 and 8). First, in terms of perception, undergraduate students had a mean rating of 3.94 (standard deviation = 0.27) which was slightly higher than graduate students’ 3.78 (standard deviation = 0.34). However, an independent sample t-test revealed a t-value of 1.468 (df=30, p=0.153) indicating that this difference was not statistically significant. This implies that students’ overall perceptual ratings of the online assessment were relatively consistent regardless of academic stage.

Table 7. Independent samples T-test analysis of students’ perceptions of online English listening comprehension assessments.

Students’ perceptions of online English listening comprehension assessments							
Variables	N	Mean	Std. deviation	T	df	Sig.	Remark
Undergraduates	16	3.94	0.268	1.468	30	0.153	Not significant
Postgraduates	16	3.78	0.338				

**Table 8.** Independent samples T-test analysis of challenges students encountered in online English listening comprehension assessments.

<b>Challenges of conducting online listening comprehension assessments</b>							
<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. deviation</b>	<b>T</b>	<b>df</b>	<b>Sig.</b>	<b>Remark</b>
Undergraduates	11	3.63	0.7810	1.076	20	0.295	Not significant
Postgraduates	11	3.34	0.3810				

The differences between undergraduate and graduate students similarly failed to reach statistical significance when faced with challenges. The mean challenge rating for undergraduate students was 3.63 (standard deviation = 0.79) compared to 3.34 (standard deviation = 0.39) for graduate students. A sample t-test revealed a t-value of 1.076 (df=20, p=0.295) pointing out that this difference was also not statistically significant despite the difference in mean scores.

## 5. DISCUSSION

Findings of the current study would be discussed with regard to the two research questions.

### 5.1. Discussion on Research Question 1

The analysis of both undergraduate and postgraduate students' perceptions and challenges regarding online English listening comprehension assessments reveals a generally positive attitude towards the benefits of such assessments, including flexibility, immediate feedback and technical improvements. These results suggest that in the post-COVID era, Chinese EFL undergraduate and postgraduate students prefer online English listening comprehension assessments over traditional English listening assessments. These results align with a previous study by [Kundu and Bej \(2021\)](#) which found that undergraduates generally hold positive perceptions towards online assessments. When contrasted with research conducted before or during the COVID-19 pandemic, [Attia \(2014\)](#) noted that the majority of participants (67.40%) in their study had positive perceptions of online assessment. [Chiang \(2020\)](#) also demonstrated that students generally agreed that online language facilitators were beneficial for long-term language learning. However, some studies conducted during the epidemic period reported negative results. For example, [Agung et al. \(2020\)](#) found that most students were not enthusiastic about online learning. In general, students' perceptions of online English assessment in the post-COVID era are largely consistent with those before the epidemic. Nevertheless, there has been an increase in the degree of positive attitude to some extent.

In addition to positive perceptions, challenges exist particularly related to time pressure, technical difficulties, and anxiety. These findings suggest that addressing the highlighted challenges is crucial to enhance their effectiveness and ensure a more equitable and stress-free assessment experience for all students while online assessments offer substantial advantages. This differs from the findings of most other studies where communication issues such as a lack of feedback from lecturers and limited human contact were identified as the significant challenges associated with online assessment ([Mukhtar, Javed, Arooj, & Sethi, 2020](#)). Similarly, [Kundu and Bej \(2021\)](#) discovered different challenges in their study that Indian students perceive online assessment as a difficult task since they lack confidence in computer skills. [Trang and Chi \(2022\)](#) and [Eman \(2022\)](#) also reported the same results. However, the access to the internet and economic challenges such as internet fees were not identified as major challenges for most participants in this study. This differs from the findings of [Adnan and Anwar \(2020\)](#) who discovered that many students in rural areas lacked access to phones or devices for online learning and assessment. These disparities may be attributed to variations in economic development, cultural differences, and educational levels across different regions worldwide. It underscores the importance of adapting online language assessment implementations to local conditions.

### 5.2. Discussion on Research Question 2

Descriptive statistics indicate that both undergraduate and postgraduate students had an overall positive attitude towards online English listening comprehension assessments. However, undergraduate students' means were slightly higher than those of postgraduate students and the standard deviation was smaller for undergraduates indicating that undergraduates' perceptions were more consistent while postgraduate students' perceptions were more widely distributed. This may be due to the fact that undergraduates are relatively more receptive to new technologies and assessment methods such as being more inclined towards using advanced technological tools like ChatGPT compared to Chan and Hu (2023). In addition, postgraduate students may have more experience with traditional assessment methods and be more skeptical of new forms of assessment. These findings align with broader trends observed in educational research where postgraduate students having developed a deep understanding and proficiency in traditional assessment forms may approach new methods with caution preferring the predictability and structure of established practices (Nimehchisalem & Mat Hussin, 2018).

Descriptive statistics also suggest that both undergraduate and postgraduate students faced challenges in online English listening comprehension assessments. Undergraduate students had a higher mean perception and a larger standard deviation indicating that they faced more challenges and a wider distribution. This may be related to their technological skills, study habits, and ability to adapt to new environments (Eman, 2022; Kundu & Bej, 2021). Postgraduate students were relatively consistent in their overall perception of these challenges while also facing challenges. This suggests that they may be more adept at dealing with them due to the higher levels of resilience and adaptability in the face of challenges developed through their advanced studies and greater exposure to academic adversity which enables them to better manage the complexities of online learning (Sosibo, 2024).

Independent sample t-test analysis indicates that academic stage does not directly influence the main challenges students face when confronted with online listening comprehension assessments but rather the challenges may be more related to technological skills, learning styles or educational environments (Kundu & Bej, 2021; Miao & Ma, 2022). Thus, from a statistical analysis perspective, this study failed to demonstrate significant differences between undergraduate and graduate students in terms of perceived and faced challenges. These findings suggest that we should pay more attention to common student needs and similar challenges faced when designing and implementing online English listening comprehension assessments to provide more effective pedagogical support and technological solutions.

## 6. CONCLUSION

This study investigated the perceptions and challenges experienced by Chinese EFL undergraduate and postgraduate students in online English listening comprehension assessments in the post-COVID era. The findings revealed generally positive perceptions towards online assessments among both groups. High levels of agreement were observed on items such as enhanced learning quality, immediate feedback, and convenience. However, significant challenges were also identified particularly those related to time pressure, technical difficulties, and anxiety. Notably, the differences between the two groups were not statistically significant while undergraduates demonstrated slightly more favorable perceptions and faced more challenges.

### 6.1. Pedagogical Implications

The results of this study have important pedagogical implications for the design and implementation of online English listening comprehension assessments. Given the generally positive perceptions, teachers can leverage the flexibility and immediate feedback features of online assessments to enhance learning outcomes. However, addressing the identified challenges is crucial. Strategies to manage time pressure, improve technical support, and reduce anxiety should be integrated into the assessment process. Training programs to enhance students' technical skills and familiarity with online assessment platforms can also mitigate some of the challenges faced.

## 6.2. Limitations and Suggestions for Future Research

Several limitations must be acknowledged in this study. Firstly, the study was limited to a specific demographic of Chinese EFL students which may not be generalizable to other contexts or regions. Secondly, although the sample size was sufficient to provide primary insights, it may be expanded to boost the findings' robustness. Additionally, the study focused on perceptions and self-reported challenges without direct observation or qualitative insights into the students' experiences. Therefore, future research should consider a more diverse and larger sample to validate and extend the findings of this study. Longitudinal studies tracking changes in perceptions and challenges over time could provide deeper insights into the evolving landscape of online assessments. Additionally, qualitative methods such as interviews and focus groups could be employed to capture more nuanced experiences of students. Finally, investigating the impact of specific interventions aimed at reducing challenges and enhancing the effectiveness of online assessments would also be valuable.

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## Appendix 1. Questionnaire.

<b>Students' perceptions of online English listening comprehension assessment</b>	
<b>No.</b>	<b>Items</b>
1	Online English listening comprehension assessment enhances my learning quality.
2	Online English listening comprehension assessment provides immediate feedback about my performance.
3	Online English listening comprehension assessment permits variable testing cycles.
4	Online English listening comprehension assessment is convenient and flexible.
5	Online English listening comprehension assessment is faster than the traditional paper assessment.
6	Online English listening comprehension assessment motivates me to improve my English listening comprehension.
7	Online English listening comprehension assessment provides higher listening audio quality.
8	Online English listening comprehension assessment improves my technical skills.
9	Online English listening comprehension assessment does not facilitate cheating.
10	Online English listening comprehension assessment can help me to achieve better grades.
11	Online English listening comprehension assessment is easier than the traditional assessment.
12	Online English listening comprehension assessment can help me to concentrate more and reduce errors.
13	Online English listening comprehension assessment reduces the exam stress.
14	Online English listening comprehension assessment is suitable for all students.
15	Online English listening comprehension assessment is helpful for long-term memory.
16	Online English listening comprehension assessment enables students to have more initiative in exploring learning resources.
<b>Challenges of conducting online listening comprehension assessment</b>	
1	Time limitation forced me to think fast in doing the assessment.
2	I face difficulty in reading the text materials in the online listening comprehension assessment.
3	Lack of physical space or proper facilities.
4	Lack of technical knowledge or skills.
5	Lack of motivation.
6	Online English listening comprehension assessment makes me nervous.
7	Lack of internet access.
8	Online English listening comprehension assessment makes me reluctant in taking responsibility for completing the assessment.
9	Economic challenges (Internet fee).
10	The monitoring system for online English listening assessment makes me feel anxious.
11	I have worries about the potential network and device issues in online English listening assessments.

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