

**STUDENTS' PERCEPTIONS OF COMPUTER-BASED LANGUAGE TEST (CBLT)  
AND VALIDATION OF CBLT-LISTENING QUESTIONNAIRE USING  
EXPLORATORY FACTOR ANALYSIS**

<sup>1</sup>Zulaikha Khairuddin, <sup>\*2</sup>Nadia Anuar, <sup>3</sup>Muhammad Aizat Azhari, <sup>4</sup>Nur Husna Serip  
Mohamad, <sup>5</sup>Khairunnisa Mohd Daud, <sup>6</sup>Azrin Raimi Ahmad, & <sup>7</sup>Muhammad Haziq Abd  
Rashid

<sup>1,2,3,5,6,7</sup> Akademi Pengajian Bahasa, Universiti Teknologi MARA,  
40450, Shah Alam, Selangor, Malaysia.

<sup>4</sup> Akademi Pengajian Bahasa, Universiti Teknologi MARA, Cawangan Pulau Pinang Kampus  
Permatang Pauh, 13500 Permatang Pauh, Pulau Pinang.

\*Corresponding author: [nadiaanuar@uitm.edu.my](mailto:nadiaanuar@uitm.edu.my)

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**ABSTRACT**

**Background and Purpose:** One of the difficulties that emerged during online learning was the teaching and learning of listening skills which prompted the development of an online platform, Computer-based Language Test (CBLT), to assist educators conduct listening practices and assessment with students without experiencing geographical limitations. As this is a novel platform, this paper intends to examine students' perceptions of listening skills and online learning after utilising this platform using the developed CBLT-Listening Questionnaire.

**Methodology:** This cross-sectional quantitative study employed questionnaires to collect data from diploma students. Two-stage sampling was utilised whereby the first stage used stratified random sampling in selecting classes from twenty-three (23) branches of the university. Simple random sampling was practised in the second stage which yielded 410 responses. The data were subjected to descriptive and exploratory factor analyses (EFA) in SPSS.

**Findings:** Descriptive analysis revealed that the respondents find listening a difficult skill to acquire yet view CBLT an excellent initiative for online distance learning. EFA revealed that the items in the

Listening construct were significant and to be retained. However, the EFA results reported that one item from the Online Distance Learning construct needs to be deleted from the questionnaire.

**Contributions:** The validated CBLT-S Listening Questionnaire serves as an instrument to investigate the impact of a novel online platform (CBLT) on students' perceptions on listening and online learning. The results from this study evidenced that online platforms that incorporate practices and assessment are viewed positively by students for pedagogy in language teaching.

**Keywords:** Computer-based language test, exploratory factor analysis, listening skill, online listening test, CBLT-listening questionnaire.

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## 1.0 INTRODUCTION

In recent years, the Malaysian higher education landscape has changed dramatically with the widespread adoption of online learning platforms. This shift towards online learning has been driven by several important factors, especially the global impact of the COVID-19 pandemic, which has given teaching and learning an ultimatum to adopt online learning options (Wen & Kim Hua, 2020). The pandemic has further expedited the utilisation of technology in education to ensure that the teaching and learning process remains effective and accessible. Thus, institutions invest in upgrading their technological infrastructure, providing devices and internet access to students, and training faculty and staff to effectively utilise digital tools for teaching and learning (Dhawan, 2020). Educators have also been adapting their teaching methodologies to suit online learning environments with approaches such as blended learning and virtual classrooms (Hodges et al., 2020). This transition to online-based learning has not only facilitated but also essentially catalysed the shift to online assessments. Now that things have returned to a pre-pandemic state, the online approach is still considered pertinent and has proven extremely beneficial. Thus, many educational institutions have decided to reassess their policies to sustain and further expand the adoption of digital learning trends. Alternatives such as online exams, continuous assessments and virtual projects were incorporated to substitute the reliance on traditional assessments (UNESCO, 2020).

The implementation of online distance learning (ODL) in Malaysia, both in schools and higher learning institutions, has consistently been facilitated by government policies such as Shift 9: Globalised Online Learning in the Malaysia Education Blueprint 2015-2025 (Higher Education) (Ministry of Education, 2015). At the individual institution level, several strategies were initiated such as flexible class schedules and pedagogies along with synchronous and asynchronous online classes (Izhar, Al-Dheleai, & Ishak, 2021). Recognising the potential of technology to revolutionise education, the Malaysian government has implemented proactive policies to further promote the integration of online learning platforms and strategies (e.g., digital technology, blended learning and MOOCs) into the education system (Low et al., 2021). Such policies are presented in the Malaysia Education Blueprint 2013-2025 (Preschool to Post Secondary Education) (Ministry of Education, 2013) and the Malaysia Education Blueprint 2015-2025 (Higher Education), both of which outline the country's strategies for transforming the education sector. These blueprints highlight the essentiality of technology utilisation in the education sector to enhance students' engagement and achievement by revamping the conventional teaching and learning processes.

Additionally, the Malaysian Ministry of Education has introduced several other initiatives to promote online teaching and learning in higher learning institutions, including the 'Digital Education Learning Initiative Malaysia' (DELIMa). This initiative aims to equip lecturers and students with the necessary digital skills and resources for effective online learning ('Ministry Launches New Digital Platform', 2020). The initiative, whose goals are the democratisation of platforms, lifelong learning, and digital transformation, provides training programmes, financial support, and digital learning technologies and resources such as Google Classroom, Microsoft Office 365, and Apple Teacher Learning Center (*Ministry of Education Launches New Digital Learning Platform*, 2020). These instances illustrate the critical importance of integrating technology into teaching and learning processes and the need for the continuous improvement of the current and future educational landscape.

In accordance with the initiatives established by the government, the Academy of Language Studies, Universiti Teknologi MARA (UiTM) has introduced a computer-based listening skills test, known as CBLT (Computer Based Language Test). The CBLT, developed by a group of developers from the Academy of Language Studies in UiTM, is an individual online listening comprehension test packaged in a multimedia format that accounts for 20% of the total semester evaluation. This test has been made compulsory by the university for all Semester 1 and 2 diploma students as part of the English Language Course (ELC) listening assessment. It consists of three sections (A, B and C) with a total of 20 multiple-choice

questions. In each section, a specific audio recording is presented and students must listen carefully and select the most appropriate answer from options A, B or C.

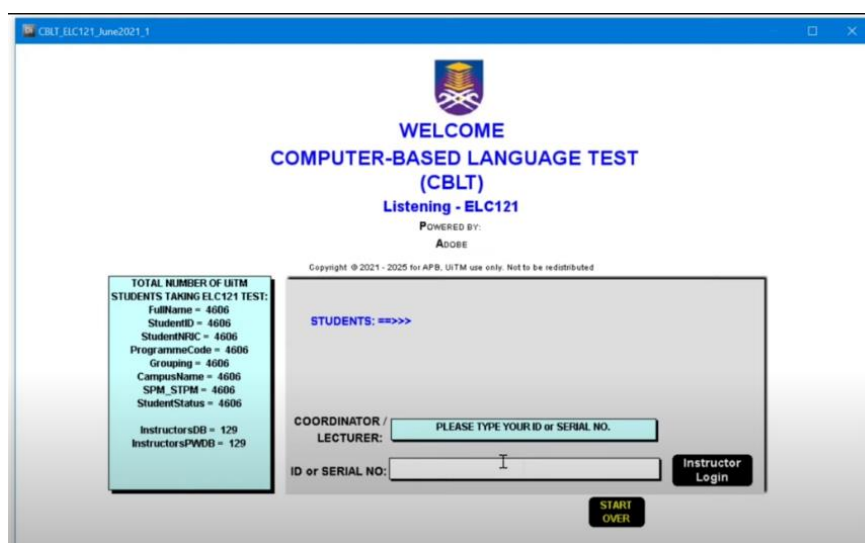


Figure 1: Initial page of CBLT

The students are given a time limit of 30 minutes to complete the test. Using this multimedia package, the CBLT is administered weekly over a five-week period by the class lecturers and the results are then averaged to determine the final grade. The transition from the traditional paper-and-pencil assessment to this CBLT platform is novel and provides an opportunity to examine the impact of this platform on students' perceptions toward listening and ODL.

Therefore, the CBLT Listening Questionnaire was developed to measure students' perceptions of online distance learning environments and their listening skills. The first research objective of this study is to gauge students' perceptions toward listening skills and online learning. The second objective of this study is to validate an instrument, CBLT-Listening Questionnaire, that was developed to measure students' perceptions of listening skills and online learning. Consequently, this study could potentially contribute to the advancement of online language learning and provide insights to educators, policymakers and researchers in the field.

## 2.0 LITERATURE REVIEW

### 2.1 Perceptions on Learning Listening Skills in English as a Second Language Classroom

Listening skill is a significant receptive skill in learning the English language (Ho, 2018). This is because learning listening skills could help students to improve their reading, writing and speaking skills. Based on results in Ho (2022), it was discovered that there was a relationship

between students' listening comprehension skills with other skills (re-asking, writing, speaking), especially speaking skills. This shows that possessing good listening skills could benefit students to master their second language (i.e., English language). Mastering listening skills also would help students to improve their note-taking skills. This is because Ngwoke, Ugwuagbo, and Nwokolo (2022) stated that adopting note-taking activities during listening comprehension class would help students' retention of the information that they have listened to. This could be significant when students are trying to understand the content of the lessons. Susaie and Mohd Shah (2022) mentioned that students preferred activities involving media for their listening comprehension class. This can be potentially attributed to the information from the media being more interesting (Sulaiman et al., 2017a).

Moreover, there are many teaching approaches and materials that could be used and employed by educators for listening comprehension classes/lessons. Students also perceived that using podcasts in their listening classroom was very helpful and fun, especially to enhance their understanding towards the content of the class and also to develop their vocabularies (Nurningsih, 2022). This means students would prefer to learn listening skills when the educators incorporate fun materials or activities in the classroom. Asyiqin, Jismulatif, and Dahnilsyah (2022) found that students enjoyed their listening activities when the educators used Google Classroom as a tool to teach listening comprehension as the tool was perceived as efficient, comfortable and beneficial. It can be said that the students preferred the integration of technology to improve their listening comprehension skills. This is because according to Syaripuddin and Rasyid (2023) and Sembiring and Katemba (2023), students perceived using YouTube in the listening comprehension classroom could affect students to understand the lesson, they would feel more motivated which led to a positive attitude in mastering and learning listening skills. Sembiring and Katemba (2023) also suggested introducing movies and music to provide a conducive learning environment to students during listening classes/lessons.

Technology or digital assistance can also be integrated in conducting listening tests. Wagner (2010) discovered that test takers for listening tests who were using video text performed better compared to those who were only listening to audio text. A potential contributor for the different performance is the extra information that the test takers could grasp when they watched the video text. Other than that, students performed and scored better when they were exposed to internet-based assessments compared to those who were still using paper-based assessments and there were significant differences between the scores from three cycles of the assessments conducted (Modarresi & Jalilzadeh, 2020). This is maybe because the

students were exposed to the new method of conducting listening tests. Kwon and Yu (2023) found that students who sit for their listening tests using video-based outperformed those who used audio-based listening tests. This could be credited to the fact that video-based listening tests expose the students to more authentic occurrences (Sulaiman et al., 2017b). Thus, the criticality of blending technology and listening skills necessitates this study to investigate the students' perceptions of online distance learning and their listening skills.

### **3.0 RESEARCH DESIGN**

This quantitative study intends to examine students' perceptions toward listening and ODL and also to validate an instrument that was developed to measure the students' perceptions. The CBLT-Listening Questionnaire was used as the research instrument for data collection in assessing their perceptions. This study employed a cross-sectional survey design in questionnaire distribution. The questionnaire consisted of three (3) sections. The first section was the demographic section which asked for two demographic characteristics which were (i) programme and (ii) campus. The second section measured students' perceptions of listening and has fourteen (14) items. However, one item was removed after students' feedback during the pre-test which highlighted the irrelevance of the item. The third section asked about students' perceptions toward online distance learning (ODL) and consisted of fourteen (14) items. Nevertheless, one item was removed from this section which brings to a total of thirteen (13) items. An interval scale was used for Sections B and C which ranged from Strongly Disagree (1) to Strongly Agree (5) as it provides more degree of freedom in inferential analysis.

A two-stage sampling procedure was conducted in this study. The respondents of this study must fulfil three criteria to qualify as a respondent. The three criteria were that the students must be (i) diploma students; (2), full-time students, and (3) enrolled in Integrated Language Skills 1 Course (ELC121). Respondents from this course (ELC121) were selected as the primary focus is to cultivate students' listening proficiency by providing drills and practices. In the first stage of sampling, a stratified random sampling was employed which observed the questionnaire to be distributed to almost 16000 diploma students from different branches of the public university. A total of 3076 responses were obtained from the first stage which fulfilled the minimum sample required of 384 as recommended by Krejcie and Morgan (1970). Data cleaning was conducted in Microsoft Excel and each response was given an ID. A total of thirty-five (35) outliers were deleted and five hundred twenty-two (522) blank responses were detected which were subsequently removed. Thus, this study obtained a total of 2521 valid responses.

The second stage of sampling employed a simple random sampling in the selection of the respondents. A random number generator was utilised in the random selection of the respondents. Therefore, a total of 410 responses were obtained and transferred to SPSS for descriptive and reliability analyses. The data collected were also subjected to exploratory factor analysis which was performed to validate the CBLT-Listening instrument. Generally, a larger sample size was preferred for EFA as the correlation estimates were viewed as more reliable (Kyriazos, 2018) which translates into high communalities and absence of cross-loadings and strong primary factor loading on the intended factor (Costello & Osborne, 2005). Therefore, a sample size of 410 was deemed sufficient as the recommended minimum sample size of 150 (Anuar, Muhammad, & Awang, 2023; Awang, 2015; Kyriazos, 2018) for EFA.

## **4.0 ANALYSIS AND DISCUSSION**

### **4.1 Demographic Profile of Respondents**

Table 1 below provides an overview of the number of respondents from each campus, highlighting the varying sample sizes across different locations in Malaysia. Subsequently, the collected data underwent statistical analysis using SPSS to examine the students' perceptions on and attitudes toward listening skills and their experiences with online learning.

Table 1: Demographic profile of the respondents

No.	Campus	Frequency	Percent
1	Rembau	53	12.9
2	Segamat	46	11.2
3	Sungai Petani	44	10.7
4	Alor Gajah	43	10.5
5	Raub	27	6.6
6	Dungun	23	5.6
7	Tapah	21	5.1
8	Seremban 3	20	4.9
9	Machang	17	4.1
10	Kota Kinabalu	16	3.9
11	Seri Iskandar	15	3.7
12	Permatang Pauh	14	3.4
13	Samarahan 2	11	2.7
14	Jengka	11	2.7
15	Beting	9	2.2
16	Arau	8	2.0
17	Jasin	8	2.0
18	Pasir Gudang 2	8	2.0
19	Puncak Alam	6	1.5
20	Puncak Perdana	4	1.0
21	Samarahan	3	0.7
22	Mukah 2	2	0.5



23	Shah Alam	1	0.2
Total		410	100.0

Table 1 presents the collected data from a total of 410 respondents across 23 different campuses. The distribution of respondents across these campuses indicates a diverse sample, providing a more comprehensive understanding of the students' perceptions towards listening skills and online learning. From the collected data, Rembau had the largest number of respondents with a frequency of 53. This indicates that a significant proportion of the respondents were from Rembau campus. Segamat and Sungai Petani campuses demonstrated substantial participation in the study, with 46 and 44 respondents respectively, closely trailing the highest frequency at Rembau. On the other hand, the frequency at Shah Alam campus was found to be the lowest, indicating a relatively lower level of representation compared to the other campuses, as evident from the participation of only 1 respondent. The study involved the participation of 151 male and 259 female respondents, thus providing a gender-diverse sample for analysis and interpretation.

#### **4.2 Descriptive Results of Respondents' Perceptions on Listening and ODL**

Table 2 presents the descriptive results of students' perceptions on listening. The table includes the item codes, corresponding items, mean scores and standard deviations (SD). The mean score represents their perceptions on each item while the standard deviation provides an indication of the variability of the responses.

Table 2: Descriptive results of students' perceptions on listening

Code	Item	Mean	SD
LIS6	I find it difficult to understand when speakers speak too fast.	3.66	1.02
LIS5	I find it easier to understand the meaning of words if they are pronounced clearly.	3.59	0.99
LIS7	I find it difficult to understand the listening text when speakers speak with unfamiliar accents.	3.55	0.94
LIS3	Listening practices in this class were useful.	3.53	0.82
LIS11	Before doing listening comprehension tasks, I fear that I cannot understand what I will hear.	3.46	0.96
LIS12	A user-friendly computer test helps me to focus on the listening text better.	3.34	0.82
LIS2	My listening ability improved as a result of listening practices in classes.	3.33	0.76
LIS4	I find it difficult to understand listening texts in which there are too many unfamiliar words.	3.31	0.83
LIS13	A trial version of the test is crucial for students.	3.29	0.76
LIS10	I stop listening when I have problems understanding a listening text.	3.26	0.98
LIS9	I find it easy to really concentrate on listening.	3.15	0.74
LIS8	I find it easy to remember words or phrases I have just heard.	3.15	0.77
LIS1	Listening skills practices are important in English classes.	3.08	0.80
Average		3.36	0.86

The table shows that the item LIS6 collected the highest mean score of 3.66, indicating that the students perceived this as a challenging aspect of listening. Similarly, the items LIS5 and LIS7 also received relatively high mean scores of 3.59 and 3.55 respectively, highlighting the impact of clear pronunciation and unfamiliar accents as challenging aspects of listening.

Research by Mohd Nor et al. (2019) provides support for the findings in the table regarding the challenge of understanding face-paced speech. The study which was conducted among students of the Diploma in Office Management and Technology at UiTM Melaka found that 20 of the respondents encountered difficulty in listening to the explanation and instruction from the lecturers due to the fast pace, leading to potential inaccuracies in their

answers. Zuki et al.'s (2022) findings corroborate with the high mean scores observed for LI5 and LI7, where they found that the engineering students in Malaysian Technical University were facing listening problems due to the unfamiliar accents and not being able to differentiate between similar sounding. The consistency in challenges identified is likely to be prevalent among students across Malaysia due to the shared language and cultural factors (Mohd Nor et al., 2019; Zuki et al., 2022).

On the other hand, item LIS1 received the lowest mean score of 3.08, suggesting that respondents perceived this item as relatively less important compared to the other items. This finding is consistent with the research conducted by Nair, Li Koo, and A. Bakar (2014) on the listening processes of pre-university ESL students. In their study, they highlighted that listening skills in Malaysia do not receive adequate attention or treatment compared to other language skills such as reading and writing. They further noted that listening skills are the least practised skill among students in secondary schools, resulting in unsatisfactory acquisition of this skill. The findings of this study therefore reinforce the notion that students in Malaysia perceive listening skills as less important compared to the other aspects of language learning. Hence, the findings from Table 2 indicate moderate positive perceptions among students on their listening skills and related factors, as evidenced by the average mean score of 3.36.

Table 3 presents the descriptive results of students' perceptions on online distance learning. The table includes the item codes, corresponding items, mean scores and standard deviations (SD). The mean score represents their perceptions on each item while the standard deviation provides an indication of the variability of the responses.

Table 3: Descriptive results of students' perceptions towards online distance learning

Code	Item	Mean	SD
<b>ODL3</b>	If things continue in ODL mode, we will soon experience a major change in education.	3.94	0.78
<b>ODL6</b>	I have become more familiar with online learning tools with ODL.	3.93	0.79
<b>ODL12</b>	Dealing with technology for ODL makes me nervous.	3.84	0.94
<b>ODL1</b>	I am glad that I am involved in ODL.	3.81	0.86
<b>ODL4</b>	ODL helps me to be an independent learner.	3.75	0.88
<b>ODL5</b>	I can learn better with the help of technologies during ODL.	3.73	0.87
<b>ODL11</b>	I have to search for supplementary materials.	3.73	0.75
<b>ODL2</b>	I believe that ODL is the future of learning.	3.69	0.86
<b>ODL9</b>	I find that ODL poses more advantages for me	3.69	0.74
<b>ODL10</b>	I have sufficient materials for ODL.	3.48	0.82
<b>ODL7</b>	I have become more familiar with online learning tools with ODL.	3.43	0.87
<b>ODL8</b>	ODL has been effective for me academically.	3.39	0.86
<b>ODL13</b>	I do not have problems coping with ODL.	3.35	0.84
Average		3.67	0.84

From the table, the item ODL3 received the highest mean score of 3.94, indicating that the respondents perceive online distance learning as a significant catalyst for transformative changes in education. This finding aligns with the study conducted by Zhu et al. (2020), which explored the attitudes of university students towards online learning and their continuous intention to undertake online courses. The research also highlighted the students' ongoing commitment to online learning was significantly influenced by their self-regulatory attitudes.

The item ODL6 which also received a high mean score of 3.93, suggesting that the respondents have adapted and gained proficiency in utilising online learning tools. However, contrasting findings emerged from a study conducted by Xhelili et al. (2021) among Albanian university students during the COVID-19 pandemic, which indicated that these students exhibited limited familiarity with technology-based education. In fact, the participants expressed a strong belief that online learning cannot be substituted for traditional classroom learning. Therefore, it is essential to acknowledge the diversity of experiences and perspectives among students in different educational settings, as indicated by Xhelili et al. (2021) above.

On the other hand, ODL 13 received the lowest mean score of 3.35, indicating that some students may encounter challenges and difficulties in managing online distance learning. This finding is supported by Al-Kumaim et al. (2021) who revealed that students encountered various challenges when using IT platform applications during online learning. These challenges include limited access to online learning support facilities as well as stress and anxiety.

The average mean score across all items was 3.67, suggesting overall positive perceptions among students on online distance learning. This finding highlights the potential effectiveness and acceptance of online learning platforms among students.

### 4.3 Exploratory Factor Analysis of Respondents' Perceptions towards Listening and ODL

Exploratory factor analysis (EFA) was conducted in this study to examine the covariation observed among a set of measured variables (Watkins, 2018) for two different constructs in this study which are listening skills and online distance learning. This test was conducted to achieve the second research objective which is to validate the items in the CBLT-Listening questionnaire. Various requirements were observed for EFA to ensure that the questionnaire is validated. First, the value of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy should be larger than 0.50 (Awang, 2015; Anuar et al., 2023). Next, Bartlett's test of sphericity results is significant at  $p < 0.001$  as underlined by Hair et al. (2014) and Bahkia et al. (2019).

Table 4: EFA results of constructs

No.	Construct	KMO (>0.50)	Bartlett's Test of Sphericity ( $p < 0.001$ )	Total Variance Explained (%)
1	Listening (LIS)	0.898	0.000	73.79
2	Online Distance Learning (ODL)	0.925	0.000	72.62

The first construct, Listening (LIS), obtained a Cronbach's alpha value of 0.88 which signifies excellent internal consistency (Gliem & Gliem, 2003). The Kaiser-Meyer-Olkin value exceeded the minimum value of 0.5 as shown in Table 4. Bartlett's test of sphericity of this construct also

demonstrated that it is significant ( $p < 0.001$ ) as recommended by Bahkia et al. (2019). The items in this construct also explained 73.8% of variance which surpassed the recommended point of 60% (Awang, 2015). The second construct which was Online Distance Learning (ODL) reported a reliability of 0.89. The Kaiser-Meyer-Olkin value exceeded the minimum value of 0.5 as shown in Table 3. Bartlett's test of sphericity of the ODL construct also revealed that this construct was significant ( $p < 0.001$ ). The items in the construct also explained 72.6% of variance which surpassed the recommended point of 60% (Awang, 2015).

Principal component analysis (PCA) was employed for the EFA test to examine the extraction of factors to determine the number of factors to be retained and eliminated. Varimax rotation was applied as it is the most widely used orthogonal factor rotation method and for its ability to clarify the analysis of factors (Hair et al., 2014; Shkeer & Awang, 2019). Factor loadings with an absolute value of below  $\pm 0.5$  were discarded while those with more than  $\pm 0.55$  were retained and measured (Hair et al., 2014). Table 5 reported that five components were obtained for the Listening construct. The results also underlined that no items need to be removed as all items achieved the minimum factor loading of 0.5. No cross-loading also occurred in this construct. Therefore, the finalised items in their respective components for the listening skills constructs are presented in Table 5.

Table 5: Factor loading of items in the listening construct

Code	Items	Factor Loading
<b>Component 1</b>		
LIS4	I find it difficult to understand listening texts in which there are too many unfamiliar words.	0.769
LIS5	I find it easier to understand the meaning of words if they are pronounced clearly.	0.529
LIS6	I find it difficult to understand when speakers speak too fast.	0.806
LIS7	I find it difficult to understand the listening text when speakers speak with unfamiliar accents.	0.878
LIS11	Before doing listening comprehension tasks, I fear that I cannot understand what I will hear.	0.524
<b>Component 2</b>		
LIS8	I find it easy to remember words or phrases I have just heard.	0.868
LIS9	I find it easy to really concentrate on listening.	0.895
<b>Component 3</b>		
LIS10	I stop listening when I have problems understanding a listening text.	0.898
<b>Component 4</b>		
LIS2	My listening ability improved as a result of listening practices in classes.	0.581
LIS3	Listening practices in this class were useful.	0.556
LIS12	A user-friendly computer test helps me to focus on the listening text better.	0.647
LIS13	A trial version of the test is crucial for students.	0.772
<b>Component 5</b>		
LIS1	Listening skills practices are important in English classes.	0.860

Table 6 indicated that five components are obtained for the online distance learning (ODL) construct. However, one item was removed from this construct which was “*I find that ODL poses more advantages for me*” (ODL9), as it did not achieve the minimum factor loading value of 0.5. The results also showed no cross-loadings. Therefore, the finalised items in their respective components are presented in Table 6.

Table 6: Factor loading of items in the online distance learning construct

Code	Items	Factor Loading
<b>Component 1</b>		
ODL7	I have become more familiar with online learning tools with ODL.	0.728
ODL8	ODL has been effective for me academically.	0.658
ODL10	I have sufficient materials for ODL.	0.512
ODL13	I do not have problems coping with ODL.	0.659
<b>Component 2</b>		
ODL12	Dealing with technology for ODL makes me nervous.	0.928
<b>Component 3</b>		
ODL1	I am glad that I am involved in ODL.	0.732
ODL2	I believe that ODL is the future of learning.	0.683
ODL3	If things continue in ODL mode, we will soon experience a major change in education.	0.719
<b>Component 4</b>		
ODL5	I can learn better with the help of technologies during ODL.	0.684
ODL6	I have become more familiar with online learning tools with ODL.	0.769
<b>Component 5</b>		
ODL4	ODL helps me to be an independent learner.	0.868
ODL11	I have to search for supplementary materials.	0.702

## 5.0 CONCLUSION

The aim of the present research was to examine students' perceptions on listening and online distance learning after using the CBLT platform. The findings of this study indicated that the majority of students opined a positive attitude towards listening skills, as well as online distance learning. Even though the students had difficulty understanding when speakers spoke too fast and with unfamiliar accents, they still believe that listening practices in class facilitated their listening proficiency. The shift of learning mode to online platforms has resulted in the students becoming more comfortable with online learning tools and demonstrating better learning experience with the assistance of technology. Students' positive experience will collectively contribute to good listening skills and none will be left behind in classes as they are able to



comprehend lectures and actively participate in discussions (Ahmad & Abidin, 2020). Therefore, the relevance of online platforms such as CBLT is clearly supported by respondents' generally positive perceptions. The results of this study will also be useful in designing online courses in the future and provide insights into the development of a listening-based curriculum and when students' perceptions are taken into consideration.

This study also sets out to explore the feasibility of CBLT-Listening Questionnaire. The results demonstrated methodological significance, as it involves the process of designing, validating, and evaluating the CBLT-Listening Questionnaire instrument. The EFA-validated questionnaire consisted of a finalised total of twenty-five (25) items which can be used by language instructors or relevant stakeholders to measure students' beliefs with regard to learning listening skills and learning via online learning. This underlines that the CBLT-Listening Questionnaire that was adapted for this study can be employed as a research instrument for future scholarly research or preliminary diagnostic tests for classrooms. Thus, prospective users of the CBLT Listening Questionnaire should consider the instrument to be tested among undergraduates and expand it by examining the effect of perceptions on listening performance. Further research with a qualitative method will also provide further empirical proof and allow the potential of the instrument to be expanded comprehensively. Future studies are also encouraged to further validate the CBLT-Listening Questionnaire using confirmatory factor analysis and in different contexts that necessitate listening tasks. The new empirical understanding of CBLT and students' perceptions of listening and online distance learning after using the platform elicited in this study strengthens the groundwork for future research to look into other CBLT platforms and diversify them to cater to other language skills.

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