

# Anxiety on Computer-Based Foreign Language Spoken Test: a Review of Literature

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**ABSTRACT.** Foreign language test anxiety is an essential factor affecting the performance of test takers. Computer-based foreign language spoken test (CBST) is a newly emerged test mode due to the advance in modern educational technology. This thesis assesses and synthesizes the recent empirical literature about anxiety on computer-based foreign language spoken test. The result shows that CBST does not aggravate anxiety experienced by participants; however, the sources for anxiety in CBST should be taken into consideration.

**KEYWORDS:** Computer-based foreign language spoken test(cbst), Anxiety, Sources for anxiety

## 1. Introduction

Anxiety is an unavoidable issue when making the researching on foreign language test. Anxiety is the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system (Spielberger, 1983). A large number of researchers investigated the role of anxiety in learning a foreign language (FL), attempting to find out why some students can achieve high language proficiency while others cannot. Most of experts in this field agree that anxiety, or more specifically language anxiety can lead direct effect on language learners' performances.

Horwitz et al. (1986) pointed out that anxiety is built up to the climax when language learners communicate with others orally and oral test has the potential of provoking both test and oral communication anxiety simultaneously in susceptible students. Consequently, it is suggested that some test-takers feel extremely worried and anxious since spoken exams may compose the most challenging and stressful part of the testing to most FL learners.

There are two most widespread types of spoken tests, face-to-face spoken exam and computer-based spoken test (CBST). The previous one is a more traditional way to evaluate the speaking skills of test-takers. The examiner and examinee have a face-to-face communication on familiar topics in target language and in a limited time.

The advance in technology provides computer-based exams as an alternative to face-to-face exams. The CBST is a multimedia English proficiency test delivered by a computer that is intended to measure and assess test-takers' comprehensive FL proficiency such as pronunciation, vocabulary, syntax and cohesion. The computer presents test instructions and test tasks, controls the preparation and response time, and stores participants' responses. The participants wear headsets and speak into microphones.

In the 1980's, the American Council on the Teaching of Foreign Languages (ACTFL) introduced semi-direct oral proficiency interviews (SOPi's) which were administered using tape recorder or computer, and the candidates' performances were recorded for later human scoring. In the 1990's, Ordinate Corporation (now part of Pearson) developed fully automated tests which were administered by computer and also scored by computer, using speech recognition and speech processing technology (Van Moere, 2010).

Due to its time-saving, fatigue-reducing and security, the CBST is gaining importance in the new century, as seen in the introduction of CB speaking tests by several large examinations boards (e. g. , ETS's TOEFL iBT speaking test, Pearson's PTE Academic test, CET-4/6 speaking test in China and Cambridge ESOL's APTIS online speaking test). Some researchers believed that computer-based communication (CMC) might reduce FL anxiety (Kern, 1995; Abrams, 2003). However, one disadvantage of computer-administered testing is that examinees may be unfamiliar with computers, thereby increasing rather than reducing anxiety (Ray & Minch, 1990). Therefore, those CBST test takers may suffer from FL anxiety, test anxiety and computer anxiety as well, which have negative effect on their oral performance.

Literature dedicated to language anxiety is prevalent with studies that revealed the association between language anxiety and computer-based FL spoken test. There are several literature publications such as *Technology and foreign language anxiety: Implications for practice and future research* written by Selami Aydin

(2018), *Computer-based English Language Testing in China: Present and Future* by Yu, G. , &Zhang, J. (2017). Nevertheless, few are focused on the effects of anxiety on FL computer-based spoken test and sources of the anxiety. This thesis will review the literature concerned with the impact of FL anxiety on oral English tests. Specifically, it will assess and synthesize the recent empirical literature pertaining to the following questions:

- 1) Does Computer-Based Spoken Test Alleviate or Aggravate the Anxiety Experienced by Test Takers?
- 2) What Are the Sources of Foreign Language Speaking Anxiety in Cbst?

The term ‘recent literature’ hereinafter refers to studies published in

Journals, print or online, and books since 2001 for the reason that the application and widespread of computer-based spoken exam has been on in the new century. Language teachers and researchers conducted a substantial body of literature, but have not been systematically evaluated yet.

## 2. Theoretical Framework of Anxiety

Before examining the research directly related to anxiety and language learning, it is necessary to interpret anxiety in different perspectives. Most psychologists and educators believed that anxiety can be primarily categorized into three types; they are trait anxiety, state anxiety and situational anxiety (situation-specific anxiety).

Trait anxiety may be defined as an individual’s likelihood of becoming anxious in any situation (MacIntyre & Gardner, 1991). This anxiety is related to enduring personality characteristic. While each person perceives a threatening situation in a different way, those with higher levels of trait anxiety may provoke far more worry than the others. Normally, people with high levels of anxiety are afraid of being judged negatively, and therefore avoid a situation in which they could be exposed to others.

Spielberger (1983) defined state anxiety as an emotional response to a particularly apprehensive situation occurring at a defined moment, and this may fluctuate in terms of time and intensity. Experiencing temporary state anxiety may interplay with an individual’s trait anxiety. Trait anxiety is perceived to be interrelated with state anxiety in the sense that the former “refers to a stable susceptibility or a proneness to experience state anxiety frequently” (GrÖs, Antony, Simms, &McCabe, 2007).

The concept of situation specific anxiety can be viewed as trait anxiety measures limited to a given context (Ellis 1994). In other words, situation-specific anxiety is a function of trait and state types of anxiety. If an individual-low or high in trait anxiety-perceives a defined context as non-threatening, then he or she will be low in situation-specific anxiety.

FL anxiety is defined as “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz and Cope, 1986), which is made up of three principal components: Communication apprehension; Fear of negative social evaluation; Test anxiety.

Obviously, theorists and researchers give different interpretation of anxiety. In this paper, I’d like to define anxiety as a kind of state anxiety in the specific situation: the anxiety that an FL learner experiences when he is required to communicate in FL during the spoken test. Numerous studies proved that anxiety upon language learning had great effects on the output stages, especially on performance of spoken tests. Consequently, it’s worthwhile to explore the effects of anxiety on FL computer-based spoken tests and the anxiety sources as well.

## 3. Methods

For obtaining research papers to review, the journals listed in Google

Scholar were taken into account. To answer the two research questions respectively, different search keywords were used in accordance with their titles and topics. “Anxiety” and “computer-based spoken English test” were employed to search the journals. 14 papers about anxiety and computer-based spoken test were analyzed. In addition, examining the bibliographies in the initially identified studies also helped the search of other relevant studies. Literature search stopped at the point when the same studies were found.

Each empirical study was analyzed case-by-case and cross cases in

This paper. Each study was examined case to case to find out whether computer-based spoken test alleviate or aggravate the anxiety. Cross case analysis was conducted to find the sources and causes of foreign language

anxiety.

## 4. Results

### 4.1 Anxiety in Computer-Based Oral Language Test

Computers and related informational science and technology have

Attained unprecedented importance in language learning and assessment in the last few decades, and the use of computer-based tests (CBT) will become even more predominant in the future without doubt. Nowadays, this term is also used interchangeably with Computer-Assisted Assessment, Computer-Aided Assessment, Computer-Mediated Assessment via Skype Videoconferencing, Wimba and VoiceThread, or Computer-Based Assessment of speaking skills (cited in Öztekin, 2011) because computers and Internet provide the latest technology for assessment.

In the field of FL speaking-related anxiety, researchers have suggested that computer-based communication (CMC) might reduce FL anxiety (Kern, 1995; Abrams, 2003). For example, through collecting qualitative data about 22 EFL learners attitude of voice boards, Hsu et al. (2008) suggested students feel comfortable with the use of voice boards in FL learning. Similarly, Song (2009) aimed to examine the impact of voice-board use on learners' spoken performance. It is reported that students significantly improved their oral performance and experienced lower anxiety with the help of new equipment. Most of students felt much more comfortable with speaking English naturally and some stated even though they cannot speak in English fluently, they at least do not feel the anxiety towards speaking English so much.

Some other teachers and educators also proved that CMC has no an anxiety-reducing effect. Arnold (2007) investigated the effect of synchronous and asynchronous computer-mediated communication (CMC) on communication apprehension. No statistically significant difference was found between the control (face-to-face discussion) and experimental groups (synchronous and asynchronous CMC) in terms of communication apprehension reduction. That is to say, computer-mediated communication cannot promote a long-term decrease in anxiety more successfully than conventional oral communication. More recently, Poza (2011) and Baralt and Gurzynski-Weiss (2011) conducted empirical studies to compare the learners' anxiety levels in computer-mediated and face-to-face tasks, the statistical data suggested that there is no significant change in anxiety levels regarding two different communicative modes.

It is believed that the introduction of new technology may be seen to add further difficulties to the test and cause unnecessary stress and communication anxiety to test takers in CBST (Saadé & Kira, 2007). Nevertheless, no consensus was reached regarding whether CBST, comparing with face-to-face spoken test, can alleviate or aggravate the test anxiety. Due to the fact that CBST needs the latest hi-tech assessing equipments, literature related with anxiety in CBST is not so abundant and limited in several countries comparing with those concerning anxiety in conventional face-to-face speaking assessment.

In USA, the participants' target languages in oral exams are Spanish, Arabic, Russian etc. instead of English in the context of other countries. Kenyon and Malabonga (2001) study probably is the earliest one to investigate the examinees' reaction and attitude to an adaptive CBST. Fifty-five American university students were administered both the face-to-face interview and CBST across three foreign languages: Spanish, Arabic and Chinese. After the test, the respondents completed a questionnaire on their attitudes towards and perceptions of that test. The result of the survey revealed that almost half of the students (47.3%) indicated they were more nervous taking the face-to-face interview than the CBST. Nevertheless, almost one in three (32.7%) indicated they were more nervous with the CBST. In addition, though the mean of anxiety for CBST was lower than that for face-to-face assessment, it was not statistically significant at the .05 level. Consequently, the author firmly believed that the learners' anxiety for the novel test type was not as strong an effect as may have been expected. To conclude, there is little difference of anxiety experienced by those foreign language learners regarding the two oral assessment types.

Similar result can be found in the study conducted by Terantino (2014), who compared students' foreign language anxiety levels while completing speaking assessment through face-to-face and Skype videoconferencing modes. Eighty-one students in Kennesaw State University were administered a modified FLCAS survey after completing the oral test in foreign language-Russian in two different delivery modes. In addition, a follow-up interview was conducted with selected eight participants. The mean anxiety score for students completing the face-to-face oral exam was 57.47 and that for students utilizing Skype was 55.55. The independent t-test analysis revealed that learners' anxiety level did not differ significantly between the two

assessment formats. Several explanations for this perspective may have been found from the responses of the interviewees. One student reported “It was the oral exam that made me feel anxious, not using Skype. “What’s more, “of course I felt more anxious at the oral interview...It really had nothing to do with Skype...”was the reply from some students when asked specifically about changes in anxiety between the two speaking assessments.

Rather than performing an actual oral proficiency test, the respondents of Dohl(2012)study were informed that they would undergo speaking assessment using either the traditional face-to-face or computer-mediated methods. The researcher investigated the effect of two testing methods could have on the foreign language anxiety scores of students who believed that they were going to be tested for oral proficiency. A total number of 214 students from Northern Arizona University who took foreign language courses Spanish, French, and Japanese were enrolled as participants for this research. The data from the adaptive FLCAS questionnaire suggested a non-significant change in learners’ anxiety levels for different speaking assessment methods. To be more specific, if students perceive that they will be tested by using traditional methods or modern way, neither one will have significant effect on their anxiety levels

In the setting of Turkey, Öztekin(2011)investigated the relationship between oral test scores obtained in two different test modes(CBST and face-to-face speaking assessment)at two different proficiency levels(pre-intermediate and intermediate), the students’perceptions of the test modes, and their anxiety levels in the two test modes as well. 66 English learners at tertiary level in a Turkish university were administered a speaking anxiety questionnaire right after completing four computer assisted and four face-to-face speaking assessments. The quantitative and qualitative data analysis indicated that learners had more positive attitude about face-to-face speaking assessment at both proficiency levels. To be more specific, both the pre-intermediate and the intermediate level participants felt apprehensive for CBST while one third of test-takers in both groups felt at ease or relaxed for face-to-face speaking exam. In addition, most of the students reported having felt relieved and comfortable due to the positive attitudes of the interviewers during the face-to-face test. Besides that, 48. 5%participants in CBST felt stressful because no one was actually listening to and paying attention to them at the moment they were taking the test. As to the effect of anxiety on oral performance, high speaking test anxiety is not related to the test scores at pre-intermediate level but a significant negative correlation was found between the scores and the two types of anxiety at intermediate level.

Focusing on speaking assessment anxiety, Sayin(2015)intended to find out whether CBST would be helpful to eliminate language learners’ anxiety compared to face-to-face oral exams. A number of 34 Turkish undergraduate students had a traditional face-to-face oral English exam for their midterm assessment while a CBST for their final test. An adaptive Sarason’s Test Anxiety Scale was employed to examine the speaking-related anxiety level of those participants. The result of the survey proved that both exam types caused anxiety to most of students and they did not have precise preference of face-to-face or CBST since the anxiety level was high in both exam types. Sayin asserted that CBST was not so effective to reduce anxiety for foreign language learners during a short period of practice time.

APTIS Test, a computer-based test of general English proficiency developed by the British Council, was adopted to provide an alternative to high-stakes certificated tests for English learners in Spain. Valencia Robles (2017)conducted a qualitative study to understand participants’ perception of the APTIS test and to investigate whether there is a relationship between their main sources of anxiety and their poor test performances. Thirty-one students in Universidad de Alcaláexpressed their feeling and thoughts towards the test they took in an online forum--the blackboard platform. Data were organized and coded by identifying the different anxiety factors. The result of the coding analysis revealed that 50%of the students reported they were anxious during the test and they attributed the anxiety to factors such as time constraints, background noise, and lack of interaction, feedback, and support when talking to a computer. Additionally, some participants related their test anxiety to the poor scores in CBST.

In 2005 the National CET Committee announced to adopt computer-based CET-SET (National College English Test-Spoken English Test), which inspired Chinese teachers and educators to make investigations concerning CBST and students’ anxiety in this latest test style.

Sun’ (2007) study is one of the earliest theses focusing on anxiety in CBST in china. A survey adapted from Horwitz FLCAS was employed to examine the anxiety difference experienced by 318 university students who took CBST and face-to-face test. The mean score of CBST was 3. 4 while that of conventional test was 2. 76. In addition, over 80%interviewees (n=30) stated that the lack of reaction from computer and the countdown timer on screen brought about higher level anxiety. Nearly 90%participants preferred conventional form of spoken test because the authentic conversation was helpful to relieve communicative apprehension.

The respondents of Lowe and Yu (2009) research were 660 Chinese college students who took both CBST

and traditional face-to-face English spoken test. 63% students preferred face-to-face testing whereas only 13% prefer CBST and the nervousness in a face-to-face context was quite different from that experienced when faced with an impassive computer. Anxiety in CBST mostly derived from worrying about making mistakes because anything spoken was recorded. In this case, test takers felt stressful for accuracy rather than communication, for grammar and vocabulary rather than ideas and content.

Shi (2012) examined the state of anxiety in the CBST and the impact of the test anxiety on the performance of 80 Chinese college students. A questionnaire adapted from Sarason's Test Anxiety Scale was given to test takers right after they took the CBST. The quantitative result reflected a relatively high level of anxiety in the CBST ( $m=77.25$  with scores over 90 signifies high test anxiety;  $SD=1.56$ ). Basing on the quantitative survey and the following interview, Shi attributed subjective factors such as learners' inexperience in CBST, poor ability of time management and poor self-efficacy; objective reasons like the noise in the multimedia language lab, lack of cooperation with the discussion partner to high test anxiety. Furthermore, there is a significantly negative correlation between students' test anxiety score and speaking test score ( $r=-.669$ ,  $p<.01$ ).

However, some other Chinese research had different findings. Li (2009) investigated the extent to which the use of different types of speaking tasks (e. g. , read-aloud, answering questions, describing pictures, listening to retell/summarize, and group discussion) with multimedia input in semester CBST might help to reduce test takers' anxiety differently. The result indicated test takers' anxiety was alleviated by the use of multimedia input. Most of students agreed that the audio and visual materials contributed to establishing authentic communication construct and there was no countdown timer on the computer screen, both methods were helpful to diminish anxiety in CBST. Nevertheless, the result of the research conducted by Huang & Hung (2013) indicated integrated speaking test tasks (with reading and listening input) in CBST did not diminish test anxiety, contrary to the theoretical assumption that integrated tasks provide audio or visual input for the test takers to process more clues as they attempt to communicate, which are related to the reduction of test anxiety.

By conducting questionnaire surveys and interviews among 52 Chinese college students who took CBST, Yang and Li (2010) reported a significant negative correlation between test takers' computer anxiety and their perceptions of computer self-efficacy ( $r=-.537$ ,  $p=.000$ ), as well as a significant positive correlation between computer anxiety and test anxiety ( $r=.455$ ,  $p=.001$ ), and the latter mostly derives from oral test anxiety. That is to say, most anxiety experienced by students derives from oral test anxiety instead of anxiety from the adoption of new test style.

Yang (2017) examined test anxiety among 330 Chinese university students in a computer-based EFL testing environment. The adopted versions of Test Anxiety Scale developed by Sarason (1978) and the Attitude towards Computerized Assessment Scale by Smith (2003) were used to collect data. The result illustrated that participants had a low level of anxiety about CBST, what's more, most test anxiety perceived by students were from the spoken English test rather than the new test style with adoption of computers. A significantly negative correlation was found between test anxiety and test performance ( $r=-.166$ ) while a weak negative relationship between performance and attitude toward CBST ( $r=-.058$ ). To conclude, the use of new technology in spoken English assessment did not generate more anxiety to language learners, nor had negative effect on students' performance.

By means of collecting data through two questionnaires, FLCAS and the speaking-related anxiety, Xu et al. (2017) investigated the anxiety of 263 students when they were involved in CBST. Results of regression analyses revealed that learners' fear of negative classroom feedback and communication apprehension were positive predictors for learners' speaking-related anxiety in CBST. That is to say, learners' anxiety in CBST mostly comes from FL spoken anxiety rather than the new test format.

#### ***4.2 Sources and Causes of Foreign Language Speaking Anxiety***

Generally speaking, FL anxiety is a complicated concept associated

With many factors. Young (1991) proposed six potential sources of language anxiety: (a) personal and interpersonal anxieties, (b) learner beliefs about language learning, (c) instructor beliefs about language teaching, (d) instructor-learner interactions, (e) classroom procedures, and (f) language testing. Yan and Horwitz (2008) focused on how students' anxiety works together with other variables in influencing language learning based on the interview of 21 Chinese college students with various levels of anxiety. Grounded-theory analysis suggested that comparison with peers, learning strategies and language learning interest and motivation are the most immediate sources of anxiety. Other variables such as regional differences, test types, Gender, class arrangement, teacher characteristics, parental influence, and language aptitude were considered by these students as more remote sources of anxiety.

Besides the sources for anxiety in face-to-face spoken test, there are some other factors contributing to the anxiety while test-takers are taking spoken exam via computer.

Shi (2011) believed that learners' inexperience in taking computer-based test is the first subjective reason. Almost 60% of participants felt unnatural and strange when talking to computer and one student reported "Although I have the experience of chatting via computer, I still feel anxious in such an evaluative situation." This view is in agreement with results of some other researches (Sun, 2007; Öztekin, 2011; Valencia Robles, 2017). Öztekin (2011) pointed out that there were several technical problems during the CBST and the students did not have a chance to practice with the software system except for a short demonstration before the actual test due to time restrictions, which might have resulted in higher levels of anxiety in this test mode. Participants in Valencia Robles (2017) were the first group of students taking the APTIS test in Guadalajara, Spain. Hence, they were not familiarized with its format nor had they received any test-training.

Time constraint is another subjective factors leading to anxiety in CBST. 70 percent of students in Shi (2012) admitted that in computer context, the short preparation time and limited answering time contributed to their anxiety. Valencia Robles (2017) revealed that some students reported that the visual timer increased their nervousness and complained the countdown timer made them feel "really nervous" and "anxious". Respondents in Sun (2007), Lowe & Yu (2009) and Sayin (2015) also agreed that failure to manage time when taking CBST is a significant source for high anxiety.

Students' attitude to CBST also plays an important part in affecting anxiety. According to Öztekin (2011), the perceived difficulty of the tests is related to the anxiety the students felt when taking CBST. A large majority of the test takers thought that the CBST was more difficult and expected low scores from the CBST. Participants in Lowe & Yu (2009) reported that nervousness in front of computer was often expressed in terms of worrying about making mistakes. Due to the fact that anything spoken was recorded, test-takers were anxious that mistakes could not be corrected and would be marked, which led to an artificial concern and worry.

The background noise in the multimedia language lab, lack of interaction and technical problems in CBST turn out to be the objective factors related to learners' worry and anxiety. All participants in the studies of Sun (2007), Shi (2012) and Valencia Robles (2017) agreed that the noise caused by simultaneous talk was the main causes of distress and anxiety. 19% of the test takers from the study conducted by Valencia Robles (2017) complained that simultaneous talks caused anxiety because it was hard for them to express themselves clearly in such a "chaotic" testing environment. Shi (2012) believed that the noise increased feelings of helplessness and influenced performance on subsequent task. The thought that they've lost the control over the testing environment, more or less, increased their anxiety.

Another significant element affecting anxiety is the lack of interaction, feedback and support while taking the CBST. The majority of the interviewee in Lowe & Yu (2009) admitted that it was the "gestures" and "facial expression" in face-to-face communication that helps to lessen the pressure. 33% participants in Öztekin (2011) agreed that the presence of someone listening to them instead of talking to a computer relieved them. This view was in line with the results of previous studies (Li, 2009; Shi, 2012; Sayin, 2015; Valencia Robles 2017).

The authors of the previous literature are convinced that technical problems are factors that cannot be neglected for anxiety in CBST. The slow Internet connection, errors emerged during website recording and storing the voices may be the main reason why students disliked the computerized test and got more anxious during it. (Öztekin, 2011). Eight percent of the test-takers in (Valencia Robles, 2017) reported that they experienced test anxiety due to inconsistencies with Internet connection, software, or hardware. Several participants even had to move to another

Computer if they had lost Internet connection or for some other technical problems, which led to unnecessary stress for all students in the same multimedia language lab.

## 5. Discussion and Implication

Depending on the synthesis of the results from the previous empirical

Studies, conclusion and implication could be made according to the three research questions.

### 5.1 Anxiety in Computer-Based Oral Language Test

According to the literature review concerning anxiety in CBST, this paper suggested that there is no significant change in anxiety levels experienced by test-takers between CBST and face-to-face test. Among the

14 theses discussed above, nine proved that learners' anxiety level did not differ significantly between the two delivery modes and most test anxiety perceived by students were from the spoken English test rather than the new test style with adoption of computers. Of the rest five studies, participants in both Sun (2007) and Valencia Robles (2017) studies are the first time to take CBST. Consequently, the lack of experience, unfamiliar with the format of test and no test-training give rise to the students' higher anxiety in CBST. Some test-takers in Valencia Robles (2017) reported that they experienced test anxiety due to inconsistencies with Internet connection, software, or hardware. It is believed that with some practical test-training in this field, test anxiety and computer anxiety may be diminished as participants are more familiar with the format of CBST and the adoption of computer in speaking assessment.

Lack of confidence in one's own language proficiency ranks first in the variables reflecting the students' anxiety level in CBST according to the investigation conducted by Shi (2012), which indicated most of anxiety felt by participants derives from their worries about language ability instead of the delivery mode of CBST. In addition, test-takers' inexperience is a key factor contributing to anxiety when they took CBST (p. 449 from Shi 2012). As a result, it is possible to imply that CBST does not aggravate the anxiety experienced by test takers. Shi also pointed out "with pre-test training, students will familiarize the new form of communication and build up confidence and reduce their anxiety as well." Sayin (2015) suggested "It is believed that if students get used to have computer-based oral exams, they might change their opinion towards the exam, or their exam anxiety will be reduced." (p. 118)

The main elements contributing to test-takers' anxiety in CBST of Lowe and Yu (2009) and Öztekin (2011) researches are the communication is not "authentic modeling of real-life" (p. 35 Lowe and Yu, 2009) because no interlocutors, no body language or facial expression can help them to relieve pressure and express ideas more successfully. It is suggested by Öztekin (2011) that the existence of someone listening to the test takers and the positive attitudes of the interlocutors were among the most noticeable points the test takers felt relieved and comfortable during face-to-face test. However, some participants in Öztekin (2011) study felt more relaxed when there was no one listening to them while talking to a computer (p. 117) and reported that some interlocutors might have interfered more than needed and helped some students answer some of the questions, which would have decreased the reliability of the test (p. 77). Similar response can be traced from some interviewees in Lowe and Yu (2009) who indicated that it was greater when facing a computer because "I can start the test more easily and start to talk" (P. 36) What's more, Lowe and Yu suggested that "Not all of this involves face-to-face interaction of the form that traditional testing takes; one could think of telephone conversations, delivering a lecture or speech, or giving a radio commentary on an event as examples of 'authentic' use of speaking that are not the one-to-one model of traditional tests." With the development of technology, it is possible for test-takers to cooperate as partners in computer-based oral test and it is firmly believed this improvement in computer test system could be helpful to reduce anxiety.

## ***5.2 Sources and Causes of Foreign Language Speaking Anxiety***

Generally speaking, a great number of factors are related to FL

Speaking anxiety, including sources for traditional face-to-face spoken test anxiety and those for CBST anxiety.

Learners' inexperience in taking CBST, time constraint and their attitude to CBST are main sources affecting anxiety experienced by test-takers. Language instructors should implement some pre-testing training and provide more opportunities for students to have practice test in multimedia language lab. Consequently, students will be more familiar with the new test format and reduce their anxiety. Some strategic training about developing time management skills is of great importance for test-takers so that they can organize ideas and use time appropriately in the limited time. Li (2009) reported that no timing bar appearing on the computer screen is effective in reducing anxiety. Participants need to be informed that the degree of difficulty between two types of spoken test is the same, as well as the computer-based assessment is more accurately and fairly graded by teachers (Lowe and Yu, 2009), which are effective methods to diminish anxiety in CBST.

Objective factors related to anxiety in CBST consist of background noise, technical problems and lack of interaction and feedback when learners taking computer-based spoken test in multimedia language lab. The first two elements should be considered by school administrations and test organizers to create a calmer testing environment and provide high quality facilities for computers software and hardware. The latest advance in technology made it possible for partner discussion in Chinese CET-4/6 Computer-based Spoken test, which might be an effective way to provide interaction and feedback for test-takers in CBST, thus reduce test anxiety.

## 6. Conclusion

To make a conclusion, it is patent that FL anxiety has a direct effect

On learners' oral test. Comparing to traditional oral test method, CBST does not aggravate anxiety experienced by participants; however, the sources for anxiety in CBST should be taken into consideration. With some practical pre-test training regarding to the format of CBST and improvement in computer test system, CBST may provide a valid alternative to conventional face-to-face oral testing.

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