

Original Paper

The Effects of Audio Comedy Test on Listening Comprehension Skills of EFL Learners

Anton Subarno^{1*}, Wen-Fu Pan² & Mei-Ying Chien²

¹ Department of Office Administration Education, Sebelas Maret University, Indonesia

² Department of Educational Administration and Management, National Dong Hwa University, Taiwan

* Anton Subarno, Department of Office Administration Education, Sebelas Maret University, Indonesia

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Abstract

This study aims to investigate the effects of audio comedy on English listening comprehension test results of English as a Foreign Language (EFL) learners. The English listening test comprises four sections; each section has a seven-minute comedy audio mode and 13 questions, and participants listen to the four sections successively. This study was conducted with 117 sophomore, junior and senior students at Sebelas Maret University in Indonesia. Two-way Analysis of Variance (ANOVA) was adopted to distinguish between male and female students on the four successive test sections measuring English listening comprehension skills. The findings are: 1. Successive practice tests will stimulate English listening skills; and 2. Successive practice tests will improve students' English listening skills. The comedy audio mode creates a low-stress English listening atmosphere and reduces the learner's anxiety.

Keywords

Audio mode, Listening comprehension skills, English as a Foreign Language

1. Introduction

Learning English is important because English is a lingua franca of practice in the education field (Hsu, Hwang, & Chang, 2014; Jain & Sidhu, 2013). In Association South East Asian Nations (ASEAN) countries, English education has specific features that distinguish it from English education in the European context. All education levels in Asia, including the undergraduate level, include English as a mandatory second language subject in their curricula (Kirkpatrick, 2011) and English teachers should therefore reflect on their teaching methods, instructional models, curriculum, testing methods, and their own capabilities (Kirkpatrick, 2014). The teaching process at the undergraduate level can be designing

as problem-based learning environments which integrate technology in classes (Hanna, 2002). English learners at this level are mature enough to prepare for their future careers and responsible enough to take their commitment as students seriously (Baptista, 2011). Undergraduate students can make use of learning-oriented multimedia, e.g., verbal and visual, to improve their English listening (İnceçay & Koçoğlu, 2017).

Listening comprehension skills are essential for language learners (Hsu, Hwang, & Chang, 2014; Carreira, 2014), and learners need to master such skills (Gowhary, Pourhalashi, Jamalinesari, & Azizifar, 2015). Learners can imitate sounds and communicate with other learners based on their listening. In the context of English as a foreign language (EFL), learners start to learn listening by recognizing standard words which are clear and comprehensible sounds. Although learners may have rehearsed vocabulary knowledge in various contexts, when they listen to English being used in real conversation with native speakers, the learning atmosphere changes and becomes more stressful, leading to anxiety about misunderstanding meaning (Wu & Huang, 2017). To reduce the level of tension in the learning atmosphere, English learners can use songs (Carreira, 2014) and comedy (Lin, 2014) as learning resources. Using songs allows learners to feel less intimidated and can help them to memorize sounds through the repetition the of lyrics. Comedy can also stimulate listeners by making them laugh, and can motivate them to listen to new words related to jokes, although sometimes cultural background factors will lead to different perceptions of a joke's meaning. This study aims to investigate the effect of using comedy on the English listening skills of EFL learners at the undergraduate level. Participants' scores on successive practice test sections are evaluated to consider whether exposure to comedy multimedia improves their English listening skills, and a comparison is made between male and female students in this regard.

2. Literature Review

Wallwork (2014) states that English listening skills can be improved outside the classroom through exposure to media such as news, TED talks, TV series, movies, and dragon dances. The important prerequisite is for listeners to set up a realistic objective as the basis for their learning. Learners can try listening to English being spoken with different accents to make the process more enjoyable. It has been suggested that listening comprehension cannot properly be parsed from the larger integrated process of language learning which embodies kinesics, proxemics, and prosody (Hoven, 1999). Kinesics encompasses conversational actions such as hand gestures, facial expressions, or other body language expressions used to send messages. Proxemics refers to the physical distance between collators which is allowable in a culture. Prosody is related to the pronunciation, tone, and speaking speed of the speakers (Hoven, 1999). English listening learners will succeed in a so-called audio listening mode if they have the requisite proficiency in vocabulary (Montero Perez, Peters, Clarebout, & Desmet, 2014). Learners need lots of vocabulary to fully understand the content of what they are listening to. The ability to understand spoken English can be measured using English listening

comprehension tests (Sharpe, 2013).

Pan (2017) explains four fundamental guidelines for listening macro-skills: meaning, function, context, and form. Meaning refers to understanding of the gist, main idea, and details of the discourse which are explicitly or implicitly stated. Function is related to the understanding of the core speech act, macro speech act, and micro speech acts which are directly or indirectly performed. Context describes the situation and the background knowledge of the discourse. Form involves recognition of the linguistic or phonological form of the speech. The topic of audio listening may revolve around personal life, social and cultural issues, or popular knowledge, with said topic being relevant to, and informing, the design of related tests.

Listening comprehension is important in language learning (İnceçay & Koçoğlu, 2017; Hsu, Hwang, & Chang, 2014). Listening skills have the function of allowing individuals to understand the content of language and imitate it based on incoming sounds. By imitating these sounds, learners can investigate and express what they have learned. Carreira (2014) states that “the fluency in listening lies in understanding that while most listening behaviour is not visible, listening actually does involve real mental processes that can be regulated by the listener” (p. 281). Learners can arrange the psychological process of listening that makes them capable of communication. Hsu, Hwang, Chang and Chang (2013) state that listening is the first step of English learning, followed by reading and writing. Rost (2014) explains the three aspects of listening fluency as “ease with continuous listening and recall of main ideas, an ability to recognize specific words and phrases in rapid speech, and smoothness of listening behaviour in face-to-face interaction” (p. 282). In relation to these three aspects, Carreira (2014) states that listening fluency depends on three frameworks, namely: top-down, bottom-up, and interactive fluency. Top-down fluency means listeners have the understanding to listen comprehensively to long, authentic input conversations. Listeners possessing top-down fluency have high receptivity, develop new ideas, understand tasks, and are familiar with strategies to use when they encounter problems in listening situations. Acquiring relevant background knowledge and participating in meaningful activities during and after listening can support top-down listening fluency. In particular, listeners will easily understand a listening topic if it relates to their educational background. The understanding of content during and after listening guides listeners as they perform subsequent actions, commands, and tasks. Bottom-up fluency, in contrast, means the ability to decode speech automatically. This also implies that listeners can express their thoughts effectively. Their native language provides a default template in their mind that allows them to decode the language. Interactive fluency is the interactive and cooperative aspect of language learning. Listeners who are interactively fluent are capable of speaking and expressing their understanding via conversations. Shahani and Tahriri (2015) investigated 45 Iranian female high school students using quasi-experimental design. The finding of the study shows that the experimental group outperformed the control group. The similar finding also stated by Ghasemolani and Nafissi (2012) who investigated 60 female students and found experimental group had a significant effect on the English listening skills. The results could have been different if the

gender proportions of the participants were different, for example, if all subjects were male/female only.

3. Method

The effects of audio comedy test on listening comprehension skills of EFL learners is focused on the learner's understanding about the comedy conversation in English. All questions of the test are arranged based on the content of the audio comedy.

3.1 Experimental Design and Hypothesis

This study adopts a time series design to investigate the effects of using a repetitive comedy audio mode on the English listening comprehension skills of EFL learners. Participants were exposed to audio comedy, after which they completed a listening comprehension test. The test was conducted in four sections, with each section having different content in terms of the specific audio comedy and the questions. All sections and questions were played once only, successively. The details of the listening comprehension test procedures are shown in Table 1.

Table 1. Listening Comprehension Test Procedures

Participants	N	Sections			
		1	2	3	4
		AC & Test	AC & Test	AC & Test	AC & Test
Male	n_1	m_{11}	m_{12}	m_{13}	m_{14}
Female	n_2	m_{21}	m_{22}	m_{23}	m_{24}

Note. AC means audio comedy; m means mean score.

The hypotheses tested in this study are: (a) Students' performance on successive sections of the practice test will exhibit a significant difference; (b) There will be no significant difference between male and female students in terms of English listening skills; and (c) Students' English listening skills will gradually improve with exposure to audio comedy.

3.2 Participants

This study was conducted with undergraduate students in Indonesia, where the students learn English as a second language. Total 117 students were participated. The details of the participants are shown in Table 2.

Table 2. The Details of Participants

Participants	N	Year of study		
		2	3 ^{ab}	4 ^{ab}
Male	39	16	9	14
Female	78	15	38	25
Total	117	31	47	39

Note. ^{ab} means the parallel class.

3.3 Instruments and Procedures

Most participants in this research are already familiar with English listening comprehension tests because they are required to pass either the EAP or the TOEFL test. English as a second language in the college makes each student interrelated with English in completing courses. The English courses at Sebelas Maret University are classified into two categories: English for a graduation prerequisite and English for science and technology. The English for a graduation prerequisite is English for academic purposes (EAP). EAP courses are taken place at the university's Language Center. In the first semester, students are required to take an EAP course and they have to pass the EAP test. If they fail to pass the EAP test in the first semester, they can re-do the test again in the following semester until they pass. Alternatively, students can provide a certificate showing their results on the Test of English as a Foreign Language (TOEFL) to waive these requirements. For graduate student, TOEFL score is used for enrollment admission. Both the EAP and TOEFL tests include evaluation of English listening comprehension skills. The English for science and technology (EST) is a course listed in the curricula of all faculties that support students with access to a range of recourses, tools, and environment related to their study field. For instance, the curriculum in the Department of Office Administration Education lists English courses such as English for correspondence, English for business, and secretarial English (Nurkamto et al., 2017). The EST courses are mandatory; each mandatory course meets 3 credit hours per week for a total period of 16 weeks.

To measure the student's English listening skills, the researchers decided to use an English listening comprehension test. A pilot study was conducted to determine the usability of the listening comprehension test. The pilot study consisted of 10 students recruited from the undergraduate students who studied at the same level with the participants of study. The result of pilot study showed that students' listening comprehension were at intermediate level.

The test of English listening comprehension was created by referring to the TOEFL style. The researchers composed the questions and then asked a native speaker of English (a Canadian) to read the questions aloud while being audio recorded. The questions comprised four sections, with 13 questions in each section. Each section lasted 15 minutes, including the audio comedy and the questions. The content of the audio comedy involved a travel agent service, and the difficulty levels of each section

were similar. Participants listened to the audio comedy for seven minutes and answered questions based on what they heard. Each correct answer was scored as one, while wrong answers were scored as zero. The valid questions and distribution based on listening macro-skills (Pan, 2017) are shown in Table 3.

Table 3. Questions Distribution Based on Listening Macro-skills Competence

Sections	Topic (travel agent)	Listening-macro skill			
		Meaning	Function	Context	Form
1	New customer, and awful staff	q1, q13	q2 , q7, q10	q6, q8, q11	q4
2	Travel documents, dinner gathering	q3, q13	q1, q12	q6, q9, q11	q7
3	Staff chatting, offering vacations	q1, q3, q11	q4, q7, q10	q5, q6, q9, q12	q13
4	Staff discussion, vacation planning	q2	q6	q5, q7, q11, q13	

Note. q means question number.

Researchers used an independent t-test to check the validity, and Cronbach's alpha to check the reliability of the test. The results of the validity test indicated that every test section had invalid items. Section one had three invalid items: q3, q9, and q12; section two had three invalid items: q4, q5, and q10; section three had two invalid items: q2 and q8; and section four had three invalid items: q4, q9, and q10. The total number of invalid items was 11 questions or 21.15% of the total. The valid items (78.85%) were checked using an item difficulty index (P-value) to verify whether all items were acceptable or not. The P-value was between .20 and .80, and the mean P-value was .47. It has been suggested that P-value should ideally be between .20 and .80 (Kline, 1993). The results indicated all items were acceptable and we could then proceed to the next level of analysis: a reliability test and two-way ANOVA. The result of the reliability test was acceptable $n = 117$ ($r = .92$, $p < .05$) and the results of the two-way ANOVA are shown in the Analysis and Discussion sections.

4. Analysis

The mean score on section one was .33. The mean score climbed up over .40 on section two and section three, then fell to .36 on section four. Scores can thus be categorized into two groups: section one and four are the "low" group, while section two and section three are "high" group. The standard deviation (SD) of each section was quite stable, between .17 to .19, revealing that no dramatic movement happened. The details of the mean and standard deviation are shown in Table 4. Based on the descriptive statistics, the mean scores of each section indicate improvement of the students' listening comprehension skills. The lowest mean listening comprehension score was in section one. Sections two and three showed higher mean scores, and section four showed the second-lowest mean. The mean scores on sections two through four were all higher than the mean score on section one. The SD from the four different sections remained stable, which means the English listening comprehension

skills of the participants were similar. In other words, none of the participants had very good or very poor listening skills based on the results of their listening comprehension tests.

Table 4. Descriptive Statistics of Listening Comprehension Test

Gender	N	Statistics	Test1	Test2	Test3	Test4
Male	39	Mean	.34	.45	.44	.37
		SD	.14	.17	.15	.17
Female	78	Mean	.33	.38	.46	.36
		SD	.19	.20	.21	.18
Total	117	Mean	.33	.40	.45	.36
		SD	.17	.19	.19	.18
		<i>p</i> -value	.60	.05	.70	.77

4.1 Successive Practice Test

The two-way ANOVA was used to analyze whether there was any difference between genders, as well as to analyze whether there was any difference among the four sections of the test. The scores on the four sections were analyzed as follows. First, the average numbers of correct answers were grouped into four sections. Second, the average numbers of correct answers were grouped into two groups, corresponding to female and male students. The results of the two-way ANOVA are shown in Table 5.

Table 5. The results of the two-way ANOVA

Source	SS	Df	MS	F	P	Meaning
Test	.82	3	.27	8.19	.00	H ₀ rejected
Gender	.05	1	.05	1.51	.22	H ₀ accepted
Test * Gender	.10	3	.06	1.03	.38	H ₀ accepted
Error	15.41	460	.03			

The results of the two-way ANOVA show there was significant difference in terms of undergraduate students scores on successive test sections ($F = 8.19$, $p < .05$). This means the mean scores within each test section (section 1, section 2, section 3, and section 4) were significantly different. The mean scores were not significantly different ($F = 1.51$, $p > .05$) between male and female students, which indicates male and female students have similar English listening comprehension skills. The intercept score between successive test sections and gender was not significantly different ($F = 1.03$, $p > .05$).

4.2 Practice Test between Genders

Statistically, the male and female students' were found to have similar capability in terms of their

English listening comprehension skills. This is supported by the p-value of each section (see Table 4) which shows there was no significant difference between male and female students. The total score of the gender comparison test also shows there was no significant difference between male and female students (see Table 5).

4.3 The Improvement of English Listening Comprehension Skills

The graph Figure 1 shows that the students' English listening comprehension skills slightly improved over the four test sections, beginning with .33 in section one and rising to .40 and .45 in sections two and three, respectively, before dropping down to .36 in section four. The trend of the mean scores shows similar performance for male and female students; if the mean score of the male students increased, the mean score of the female students also increased, and if the mean score of the male students decreased, the mean score of the female students also decreased.

Table 6 describes the multiple comparison of each section using the Bonferroni method. There are three pairs which exhibited significant differences when compared: section 1 versus section 2; section 1 versus section 3; and section 3 versus section 4 (see Table 6).

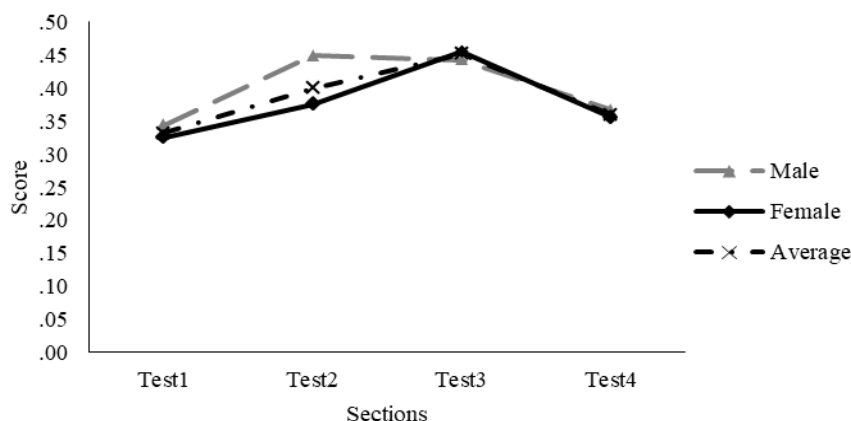


Figure 1. The Mean Scores of Each Section

Table 6. Bonferroni Post Hoc Test

Test (I)	Test (J)	Mean Difference (I-J)	Significance	Meaning
Test 1	Test 2	-.07	.03	H ₀ rejected
Test 1	Test 3	-.12	.00	H ₀ rejected
Test 1	Test 4	-.03	1.00	H ₀ accepted
Test 2	Test 3	-.05	.19	H ₀ accepted
Test 2	Test 4	.04	.56	H ₀ accepted
Test 3	Test 4	.09	.00	H ₀ rejected

Note. The critical value of significant is set at .05.

5. Discussion

The scores on the listening comprehension test could be categorized as low scores because the overall mean was only 38 per cent correct answers. It can be seen that the scores ranged from the mean of test 1 ($M = .33$) to the mean of test 4 ($M = .45$) (see Table 4) and the grand mean was .38. The low scores on the listening tests indicate that participants either were not familiar with the audio topic of the travel agency, or have poor listening comprehension skills. All participants were students in the field of education, and the audio comedy topic involved a travel agency. While the students' study background is not related to the audio topic per se, some elements of the audio content are also discussed in the field of education. The listening comprehension test in this study was designed to cover four listening macro-skills corresponding to meaning, function, context, and form (Pan, 2017). Most participants were weak when it came to answering questions based on context and meaning macro-skills. It bears noting that the context macro-skills are related to background knowledge; participants may have misunderstood the conversation and questions in this part due to slang and colloquialisms used in the conversation, or other unfamiliar words. Wallwork (2014) argues that comedy can be used to improve English listening skills, but it will be more difficult for learners when non-standard English or slang is used to convey the humor.

In addition to the background knowledge, the range of subject matter the listening materials cover (i.e., whether they pertain to local or global topics) can be considered as an obstacle to success on the English listening comprehension test. Becker (2016) states that questions containing local information are easiest to answer, compared to questions targeting preferences and pragmatic inferences. Pan (2017) stated that topics for English listening comprehension tests could be about personal life, social and cultural issues, or popular knowledge which is relevant to the design of the tests. The comedy dialogues used in this study featured actors speaking with British accents, which may have been an obstacle to participants' listening comprehension.

Table 5 shows the calculation between test sections and gender, and the results can be summarized as follows: (a) scores on the sections within the test were significantly different ($F = 8.19, p < .05$); (b) no significant difference was found in the test results between genders ($F = 1.51, p > .05$); (c) the intercept between test sections and gender was not significantly different ($F = 1.03, p > .05$). The most important findings revealed by this study are findings (a) and (b), which are discussed below.

5.1 Successive Practice Test Sections

Students' scores on sections within the test showed significant difference ($F = 8.19, p < .05$), indicating that repeated exposure to audio comedy successfully improved participants' listening skills, as measured by the test. In other words, the audio mode helped participants to improve their English listening skills. This finding is supported by İnceçay and Koçoğlu (2017) who found that using listening tests using audio mode is a familiar phenomenon for students, and there will be no problems with doing so as long as the students focus on the instructions and questions. Moreover, audio mode can reduce the students' stress compared to visual mode. Audio mode reduces meaning redundancy

(Ozdemir, Izmirli, & Sahin-Izmirli, 2016) and in line with this principle, it has been suggested adding text on screen which duplicates spoke audio contributes to poorer learning (Samur, 2012). Moreover, listening with audio mode fosters the improvement of English learners' listening skills. Although the participants have poor listening skills overall, as mentioned at the beginning of the Discussion section, they can still improve their listening skills via repeating listening. As stated by De Āk (2014) "language processing becomes faster with practice, even in childhood and adolescence" (p. 286).

A format involving learners listening repeatedly to English helps listeners to familiarize themselves with the test format. All sections of the test used in the present study relied on multiple choice format, with four options for each answer. The format helped test takers to predict the questions because the textbook was distributed before the listening test started. Participants could also have the textbook containing the answer options open while the audio played. This gave the participants the opportunity to quickly read over the answer options, which helped them to predict the questions and made it easier for them to choose the best answers. The assumption is consistent with Koyama, Sun and Ockey (2016) and Hemmati and Ghaderi (2014), who found that the ability to preview questions only, answer options only, or both questions and answer options helped listening comprehension test takers, compared to test takers who did not have the ability to preview in these ways.

5.2 Comparison of Test between Genders

Comparing the test results between genders did not reveal any significant difference ($F = 1.51, p > .05$). The mean scores of male and female students were not significantly different, although male students showed slightly quicker responses on section 2. The mean scores on the section, third and fourth sections reverted back to both genders having the same mean values (Figure 1). This finding is consistent with Malagoli and Usai (2018), who found that male students have a better working memory than female students, but there is no significant difference between male and female students in executive function, when executive function is defined as a mixed ability construct composed of inhibition and working memory. The findings of Malagoli and Usai's (2018) study with 227 students aged 14- to 19 (148 female) supported previous research on both cognitive and neurological domains and were in accordance with what we know about knowledge development. Bohanek and Fivush (2010) likewise found that female students have higher levels of cognitive processing narrative skill than male students, but when the narrative itself is treated as a controlling variable between male and female students, there is no significant difference. Cox and Davies (2012) tested the English speaking capability of 179 EFL learners using automatic speech recognition (ASR) scored elicited oral response (OER), and their findings also showed no significant difference between male and female students. Cox and Davies did not analyze listening skills in particular, but English listening skills have been shown to be essential in language learning (Hsu, Hwang, & Chang, 2014; Carreira, 2014). Learners can speak because of their listening comprehension, they can imitate words based on what they have heard (Surgenor et al., 2017; Terantino, 2011; Birul ěs-Muntan ěl & Soto-Faraco, 2016). Furthermore, Hakan, Aydin, and Bulent (2015) analyzed 120 undergraduate students learning language strategies, breaking

them down into six components: memory, cognitive, compensation, metacognitive, affective, and social. They found that male and female of undergraduate students used similar learning language strategies, and only the compensation component showed a significant difference between male and female students. This supports the assertion that there is no need to provide special learning strategies to members of each gender to improve language learning.

5.3 The Improvement of English Listening Comprehension Skills

The results of the test of students' English listening skills show a slightly upward trend if we look at the mean scores on the four successive sections, with a gradual increase from the first to the third sections, but a subsequent decrease on the fourth section (Figure 1). In visual terms, learners' listening skills appeared to move up and down like a zigzag line. The trend can be illustrative for English educators in that they show English listening skills will not always necessarily show a steady increase, but may periodically decline back to previous levels, if only temporarily. This is consistent with Zafar (2016) who stated that remedial teaching strategies could be considered to improve students learning when errors or misuses of English language vocabulary were noted. The same proposition was advanced by Hung (2017) who found that remedial teaching given prior to summative tests helped students who had problems mastering learning materials. Additional information in the form of the post hoc comparison test showed that students' performance on section three (which had the highest median score) showed a significant difference compared with their performance on both section one and section four (see Table 6). This finding is consistent with Schmidt, Houwer and Rothermund (2016) who observed a learning acquisition curve that showed lower performance at the beginning and at the ending of a practice phase.

6. Conclusions and Implications

This study empirically examined the effects of what we call comedy audio mode on the English listening comprehension skills of EFL learners who are undergraduate university students. The results showed a significant difference in terms of students' test scores among four test sections, but no significant difference between male and female students. Exposure to successive practice tests appeared to allow the English learners to become increasingly familiar with the test format, put them at ease, and may have even helped them to identify the best answer for each question. The listening topic chosen can influence test takers' levels of anxiety and stress. Comedy dialogues were chosen with a view to reduce the level of tension in the English learning atmosphere and to motivate English learners to follow along with the audio content.

The audio mode of listening comprehension reduces students' stress during listening training and helps them to grasp the content of conversations while focusing on the questions and answer options. Students could focus on questions and the audio dialogue without being distracted by pictures, running texts, or video images, and this freedom from distraction could help them to choose the best answers.

In addition, the improvement of students' listening comprehension skills exhibited a zigzag upward trend, with scores on three sections showing an increase and only one section showing a slight decrease.

This study has only focused on undergraduate students and the results cannot be generalized to other school levels. Hence, we conclude with some suggestions for future study. First, the trend of listening comprehension skills could be investigated by using a test with more than four sections or with intermittent sections. Secondly, mixed gender groups of male and female students performance on the four test sections could be explored with subjects in other levels of education.

References

- Baptista, A. V. (2011). Non-Traditional adult students: Reflecting about their characteristics and possible implications for higher education. *Procedia - Social and Behavioral Sciences*, 30, 752-756. <http://doi.org/10.1016/j.sbspro.2011.10.147>
- Becker, A. (2016). L2 students' performance on listening comprehension items targeting local and global information. *Journal of English for Academic Purposes*, 24, 1-13. <http://doi.org/10.1016/j.jeap.2016.07.004>
- Birulés-Muntanél, J., & Soto-Faraco, S. (2016). Watching subtitled films can help learning foreign languages. *Plos One*, 11(6), 1-10. <http://doi.org/10.1371/journal.pone.0158409>
- Bohanek, J. G., & Fivush, R. (2010). Personal narratives, well-being, and gender in adolescence. *Cognitive Development*, 25(4), 368-379. <http://doi.org/10.1016/j.cogdev.2010.08.003>
- Carreira, J. M. (2014). How can we enhance EFL learners' listening fluency? Teaching connected speech to Japanese university students using songs. In T. Muller, J. Adamson, P. S. Brown, & S. Herder (Eds.), *Exploring EFL Fluency in Asia* (pp. 297-311). London, UK: Palgrave Macmillan.
- Cox, T. L., & Davies, R. S. (2012). Using automatic speech recognition technology with elicited oral response testing. *CALICO Journal*, 29(4), 601-618. <https://doi.org/10.11139/cj.29.4.601-618>
- Deák, G. O. (2014). Interrelations of language and cognitive development. In P. Brooks, & V. Kampe (Eds.), *Encyclopedia of Language Development* (pp. 284-291). SAGE.
- Du, Y. (2016). Research Design. In *The use of first and second language in Chinese university EFL classrooms*. Singapore: Springer.
- Ghasemolandi, F., & Nafissi, Z. (2012). The effects of using English captions on Iranian EFL students' listening comprehension. *Procedia - Social and Behavioral Sciences*, 64, 105-112. <http://doi.org/10.1016/j.sbspro.2012.11.013>
- Gowhary, H., Pourhalashi, Z., Jamalinesari, A., & Azizifar, A. (2015). Investigating the effect of video captioning on Iranian EFL learners' listening comprehension. *Procedia - Social and Behavioral Sciences*, 192, 205-212. <https://doi.org/10.1016/j.sbspro.2015.06.029>
- Hakan, K., Aydin, B., & Bulent, A. (2015). An investigation of undergraduates' language learning strategies. *Procedia - Social and Behavioral Sciences*, 197(Supplement C), 1348-1354. <https://doi.org/10.1016/j.sbspro.2015.07.388>
- Hanna, N. R. (2002). Effective use of a range of authentic assessments in a web assisted pharmacology course. *Educational Technology & Society*, 5(3), 123-137.

- Hemmati, F., & Ghaderi, E. (2014). The effect of four formats of multiple-choice questions on the listening comprehension of EFL learners. *Procedia - Social and Behavioral Sciences*, 98, 637-644. <https://doi.org/10.1016/j.sbspro.2014.03.462>
- Hoven, D. (1999). A model for listening and viewing comprehension in multimedia environments. *Language Learning & Technology*, 3(1), 88-103.
- Hsu, C. K., Hwang, G. J., & Chang, C. K. (2014). An automatic caption filtering and partial hiding approach to improving the English listening comprehension of EFL students. *Educational Technology & Society*, 17(2), 270-283. <https://doi.org/10.1086/131285>
- Hsu, C. K., Hwang, G. J., Chang, Y. T., & Chang, C. K. (2013). Effects of video caption modes on English listening comprehension and vocabulary acquisition using handheld devices. *Educational Technology & Society*, 16(1), 403-414. <https://doi.org/10.1002/14651858.CD010586.pub2>
- Hung, H.-T. (2017). The integration of a student response system in flipped classrooms. *Language Learning & Technology*, 21(1), 16-27.
- İnceçay, V., & Koçoğlu, Z. (2017). Investigating the effects of multimedia input modality on L2 listening skills of Turkish EFL learners. *Education and Information Technologies*, 22(3), 901-916. <https://doi.org/10.1007/s10639-016-9463-3>
- Jain, Y., & Sidhu, G. K. (2013). Relationship between anxiety, attitude and motivation of tertiary students in learning English as a second language. *Procedia - Social and Behavioral Sciences*, 90, 114-123. <https://doi.org/10.1016/j.sbspro.2013.07.072>
- Kirkpatrick, A. (2011). English as an Asian lingua franca and the multilingual model of ELT. *Language Teaching*, 44(2), 212-224. <https://doi.org/10.1017/S0261444810000145>
- Kirkpatrick, A. (2014). Teaching English in Asia in non-Anglo cultural contexts: Principles of the “lingua franca approach”. In R. Marlina, & R. A. Giri (Eds.), *The Pedagogy of English as an International Language: Perspectives from Scholars, Teachers, and Students* (pp. 23-34). Cham: Springer International Publishing.
- Kline, P. (1993). *The handbook of psychological testing*. London, UK: Routledge.
- Koyama, D., Sun, A., & Ockey, G. J. (2016). The effects of item preview on video-based multiple-choice listening assessments. *Language Learning & Technology*, 20(1), 148-165.
- Lin, W. (2014). *The effect of repeated viewings of bilingual-subtitled videos on college students' listening comprehension* (Unpublished master's thesis). National Chung Cheng University, Taiwan.
- Malagoli, C., & Usai, M. C. (2018). The effects of gender and age on inhibition and working memory organization in 14- to 19-year-old adolescents and young adults. *Cognitive Development*, 45, 10-23. <https://doi.org/10.1016/j.cogdev.2017.10.005>
- Nurkamto, J., Yusuf, M., Sudjadi, I., Purnama, S. K., Sumarwati, & Parwyanti, Y. (2017). *Pedoman akademik fakultas keguruan dan ilmu pendidikan Universitas Sebelas Maret tahun 2017/2018* [Academic guidance of teacher training and education faculty Sebelas Maret University academic

- year 2017/2018]. Surakarta, Indonesia: UNS Press.
- Ozdemir, M., Izmirli, S., & Sahin-Izmirli, O. (2016). The effects of captioning videos on academic achievement and motivation: Reconsideration of redundancy principle in instructional videos. *Educational Technology & Society, 19*(4), 1-10.
- Pan, Z. (2017). *Assessing listening for Chinese English learners*. New York, NY: Routledge.
- Perez, M. M., Peters, E., & Clarebout, G. (2014). Effects of captioning on video comprehension and incidental vocabulary learning. *Language Learning & Technology, 18*(1), 118-141. <https://doi.org/10.1109/34.868688>
- Rost, M. (2014). Developing listening fluency in Asian EFL settings. In *Exploring EFL Fluency in Asia* (pp. 281-296). London, UK: Palgrave Macmillan.
- Samur, Y. (2012). Redundancy effect on retention of vocabulary words using multimedia presentation. *British Journal of Educational Technology, 43*(6), 166-170. <https://doi.org/10.1111/j.1467-8535.2012.01320.x>
- Schmidt, J. R., Houwer, J. D., & Rothermund, K. (2016). The Parallel Episodic Processing (PEP) model 2.0: A single computational model of stimulus-response binding, contingency learning, power curves, and mixing costs. *Cognitive Psychology, 91*, 82-108. <https://doi.org/10.1016/j.cogpsych.2016.10.004>
- Shahani, S., & Tahriri, A. (2015). The impact of silent and freeze-frame viewing techniques of video materials on the intermediate EFL learners' listening comprehension. *SAGE Open, 5*(2), 2158244015585999. <https://doi.org/10.1177/2158244015585999>
- Sharpe, P. J. (2013). *Barron's TOEFL IBT* (14th ed.). New York, NY: Barron's Educational Series.
- Surgenor, D., Hollywood, L., Furey, S., Lavelle, F., McGowan, L., Spence, M., ... Dean, M. (2017). The impact of video technology on learning: A cooking skills experiment. *Appetite, 114*(Supplement C), 306-312. <https://doi.org/10.1016/j.appet.2017.03.037>
- Terantino, J. M. (2011). YouTube for foreign languages: You have to see this video. *Language Learning & Technology, 15*(1), 10-16.
- Wallwork, A. (2014). Using the web and TV to improve your listening skills. In *Telephone and helpdesk skills: A guide to professional English*. New York, NY: Springer.
- Wu, T. T., & Huang, Y. M. (2017). A mobile game-based English vocabulary practice system based on portfolio analysis. *Educational Technology & Society, 20*(2), 265-277. <https://doi.org/10.2307/90002180>
- Zafar, A. (2016). Error analysis: A tool to improve English skills of undergraduate students. *Procedia - Social and Behavioral Sciences, 217*(Supplement C), 697-705. <https://doi.org/10.1016/j.sbspro.2016.02.122>