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Improving English Pronunciation by Using Instructive Musical Exercises: University Teaching Context in Serbia

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***Abstract*—The paper examines the influence of the application of instructive musical exercises on better and more correct pronunciation of certain sentences in English. In relation to the type of sentences (interrogative in form of questions, affirmative with adjuncts and if-clauses) and the intonation of the pronunciation of words and phrases within the sentences, a melody was specially composed for each sentence, and the primary criterion was matching the melodic flow with the intonation of the sentence. The training was implemented with participants (future preschool teachers) in the first year of undergraduate studies in May 2022. Students were tested before and after the training. The results of the conducted research showed that instructive musical exercises based on the common elements of language and music, aimed at solving a specific problem, contributed to a more precise pronunciation of certain words and given sentences in terms of accents, rhythm, pitch and intonation.**

***Index Terms*—English pronunciation, music exercises, university teaching**

I. Introduction

Music is present in all spheres of human life since the birth of man and is one of the most significant and earliest forms of communication. The first children's singing occurs in the preverbal period (Voglar, 1997). The musical component of speech is the earliest dimension of language that children use and understand (McCormack, 2017). Numerous studies point to common features of speech/language and music, as well as common features of foreign language learning and music practice. These are primarily the temporal acoustic properties of speech and musical sound and the detection of pitch differences specific to both domains (Milovanov & Tervaniemi, 2011), where by the initial learning period plays a key role in both foreign language acquisition skills and music education (music performance). When it comes to studies that indicate an overlap of behavioral and neural resources between language and music (Milovanov & Tervaniemi, 2011), we encounter different data and interpretations. According to Milovanov and Tervaniemi (2011), specific neurocognitive functions characteristic in music are controlled by the right hemisphere of the brain, and linguistic functions by the left hemisphere. In contrast to the aforementioned findings, recent research on neurophysiological aspects related to music perception shows that music can be considered equivalent to language, the language and music components share some brain fragments, "thus excluding the theory of two independent areas: the right hemisphere for music and the left for language" (Picciotti et al., 2018). The interaction of music and language skills, however, often occurs in one direction. A small number of studies examined the influence of linguistic skills on the development of musical abilities, while at the same time there is a growing body of scientific evidence that points to the positive effects of playing music on the development of language skills on both a cognitive and a neural level (Milovanov & Tervaniemi, 2011).

In the focus of previous research (Patel & Iversen, 2007; Moreno et al., 2009; Piri, 2018; Oesch, 2019; Swaminthan & Schellenberg, 2020) is the influence of musical experience and musical training on learning a foreign language in different segments. Several studies have suggested that intensive music training already at preschool age improves children's language skills, but also that such training is not available to everyone (Linnavalli et al., 2018). In addition to influencing correct pronunciation of foreign words and enriching vocabulary, music at an early age has great importance for increasing social interaction and activity of children, creating a cheerful mood and free expression of feelings, which indirectly affects language learning (Assadilah & Barokah, 2018). A significant amount of research is focused on pitch and its use to convey linguistic information (Wong et al., 2007; Patel & Iversen, 2007). In English, as in many other languages, pitch makes a lexical distinction between words, because the same word, spoken with a different pitch pattern, would have a completely different meaning. It is believed that "because music relies on fine distinctions in pitch, timbre and duration, it might be that musical training enhances basic spectrotemporal sound-

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encoding mechanisms that are also relevant for speech" (Patel & Iversen, 2007, p. 371). Moreno and his colleagues (Moreno et al., 2009) examined the influence of musical training on language processing of pitch and reading skills, and the results showed that musical training improved the processing of pitch in speech, as well as the reading/pronunciation of irregular words.

"Foreign language learning skills are based on rhythm, singing and musical perception" and for this reason musical training contributes to the acquisition of phonological skills needed for foreign language learning (Picciotti et al., 2018). The authors Swaminthan and Schellenberg (2020) came to similar results, emphasizing that formal musical training can develop language abilities, primarily the ability to observe, and then more complex skills such as reading. However, it should be taken into consideration that musical training is not enough and that a combination of several factors, first of all, cognitive abilities is necessary (Swaminthan & Schellenberg, 2020). In addition, positive outcomes occurred when music training used melody as a basic means of musical expression (pitch relationships between tones), while musical exercises in the area of rhythm did not improve the phonological awareness of the participants.

The use of music in the teaching of a foreign language, at all levels of education, also depends on the competence of the teacher who teaches. In doing so, we mean the choice of music, methodological approach and understanding of the connection between musical activities and learning a foreign language. The benefit of applying musical content in foreign language teaching is not only the boost of students' motivation, which is often its only function in class (Besedova et al., 2019), but the structural connection of language and music through common elements: rhythm, intonation, accents, tone and melodies (Oesch, 2019). Connecting the aforementioned common features of language and music is a basic component of musical training applied in our research and one of the theoretical starting points in designing the methodological framework.

Researching the literature background, the following musical activities were used to study correlations between language learning and music: singing songs (Christiner & Reiterer, 2013; McCormack et al., 2018), listening to music and rhythmic activities (Degrave, 2019). In both previous and current research, it is particularly emphasized that the use of song can help teach natural/correct pronunciation (McCormack et al., 2018). In this sense, the application of instructive musical exercises with text (or music-based exercises), specially designed for practicing the pronunciation of certain sentences in English, can be considered as an innovative method of working in foreign language teaching. The fact that "adequate material is not always easy to find" (Degrave, 2019, p. 412) is mentioned as one of the reasons for not enough used musical activities in foreign language teaching, especially at an older age, which is why this paper also has both scientific and practical significance.

II. Method, Aims and Participants

The results of previous research are indisputable indicators that music has a positive effect on learning a foreign language, but also that it is used more often at a younger school age. In this context, the research problem of this study is the following: "Is it possible and in what way to apply music training in foreign (English) language classes in working with university students?".

The aim of the research was to examine whether music training (in university teaching) can contribute to better pronunciation of a foreign language among students-future teachers. In accordance with the set goal, students were tested before (interview 1) and after the realization of a short musical training (interview 2). The testing consisted of reading out-loud of different types of sentences in English. The students' reading was recorded. The research was conducted with students of the first academic year of bachelor academic studies at the Faculty of Education in Jagodina (Serbia), department Preschool Teacher Education. The sample was consisted of 45 students. The training lasted three weeks as part of regular lessons. The research was divided into 3 segments: in the first segment, musical exercises were performed for the pronunciation of questions, in the second segment for the pronunciation of affirmative sentences with adjuncts, and in the third segment exercises for if-clauses. The musical exercises with lyrics used in the training were specifically designed for research purposes, in two segments. The students had the task to, after the researcher's demonstration, sing a melody with the text of the given sentence that was on the slide. The singing was repeated several times depending on the complexity of the melody and intonation. The second (more complex) task was related to the listening perception and recognition of sentences based on listening to their melodies, which the researcher sang this time in a neutral syllable, without lyrics. The goal of these exercises is to additionally focus attention on the intonation of the sentence and the common properties of spoken and musical intonation. After the training period, the students read the same sentences again (recordings of interview 2) in order to determine whether the musical exercises influenced the more accurate pronunciation of words and sentences.

Procedure (the description of the instructive musical exercises)

In relation to the type of sentences (questions, affirmative sentences with adjuncts and if-clauses) and the intonation of the pronunciation of words and phrases within the sentences (Appendix. Sentences in English), a melody was specially composed for each sentence. When composing the melody, the primary criterion was matching the flow of the melody with the intonation of the sentence.

Moreover, based on the intonation of certain syllables, we determined the pitch of the tones in the melody, that is, we tried to equalize the pitch of the given syllable; if a syllable is pronounced in in a higher intonation than the previous syllable, it corresponds to a higher tone compared to the previous tone in the melody. For parts of the sentence that are

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pronounced without changes in intonation, the melody consists of repeated tones (Figure 1) or it is decorated with a neighboring tones, in order to avoid the narrative character of the melody (Figure 2).

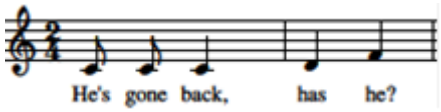

Figure 1. Melody With Repeated Tones

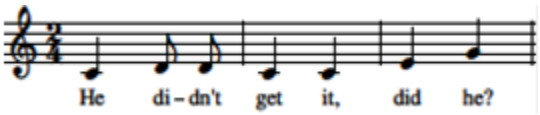

Figure 2. Melody With Neighboring Tones

In this way, the melodious of the exercises is achieved, which the examinees remember faster and easier and intonate more precisely.

Words and syllables determined the metro-rhythmic component of the melody. When it comes to accentuation of syllables and words, matches with musical accents have been achieved to a greater extent. However, literal matches would lead to a violation of the aesthetic component of both language and music (sentences and melodies). Subordinate clauses separated by a comma when the first begins with If had a melody in which both the first and second parts of the melody begin with a pause or the same tone (Figure 3).

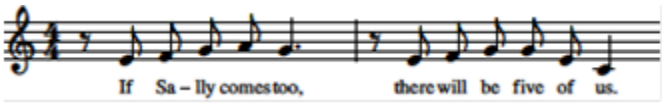

Figure 3. Melody With a Pause at the Beginning

In this way, an analogy was established between the linguistic and musical components. Musical exercises are especially important when pronouncing certain complex syntagms or words, such as 18-year-old or magnificently. For the phrase 18-year-old, a melody was created without major jumps, with syncopation and shorter note values, so that the students could sing the phrase without interruptions and taking breaths, as in speech. In the word magnificently, which is represented in the musical exercise by an ascending melodic line, the first syllable is sung longer to highlight the accent of the next syllable and to make the pronunciation of the word easier. Another limitation of designed musical exercises with text needs to be emphasized. Instructive musical exercises were applied, which contain didactic elements and a specific goal. In music education, these are used in the function of acquiring certain musical concepts and phenomena, while other aesthetic components are subordinated to that function. From a didactic and methodological aspect, their application with the aim of improving pronunciation in foreign language learning is justified in this research as well.

III. Results and Discussion

The participants' answers were analyzed qualitatively by the authors and backed up with descriptive statistics using an inductive method in which categories were extracted from the data. This method is based on content analysis of interview 1 and interview 2 and was implemented for analyses of students' recordings.

Namely, for the examination we focused on three main categories of sentences: 1) Questions, 2) Adjuncts in the affirmative sentences and 3) If-clauses. These were the categories we selected for the students to tackle during the research process. The reason we chose these categories was that the students used them the most and yet had trouble in pronouncing words and sentences in proper stress, rhythm, pitch and intonation. Therefore, the following sub-categories - stress, rhythm, pitch and intonation will be taken into account during the data analysis.

A. Questions

According to Carter and McCarthy (2006, p. 724), alternative questions most typically have a rising intonation on each alternative (↗ ↗) such as in the example *Could you go and work in France or Italy?* By listening to the recordings made in the interview 1, we determined that 38 students out of 45 had problems to pronounce and read the sentence fluently. The most obvious problem was to read the sentence without making pauses between words, and to read it without larger interruptions. Also, we have noticed some miscues in oral reading such as mispronunciation of vowel cluster like *-ou-* in *could* and vowel *-a-* in words *France* and *Italy*. The students also had problem with the intonation in the second alternative *or Italy* where the rise of intonation was expected in order to express equal consideration by the speaker, and the possible answer yes to both given possibilities. Word stress in this example was put in proper place by 40 students (out of 45) but the rhythm of a sentence and its pattern in time was not marked by the regulated succession of strong and weak elements, or a rising intonation on each alternative. Therefore, 38 students from our sample, showed in the interview 1 that they need help in reading and pronouncing the selected words and sentences in English as a

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foreign language. After three weeks of musical exercises, we conducted interview 2 to find out if there is an improvement in intonation, rhythm, stress and pitch. The recordings showed that there was a significant improvement in intonation in 37 students out of 38 who had problems. These students managed to read the sentence with a rising intonation on each alternative, without making unnecessary discontinuation between words. Likewise, we may say that the musical exercises helped in terms of correct pronunciation of vowel cluster like *-ou-* in *could* and vowels in words *France* and *Italy*. The rhythmic beat, created by the pattern of stressed and unstressed syllables, was improved in 35 students out of 38. Word stress was already in proper place by the most students so we did not have much of a change in this category. This example sentence, in the examined sample of students, showed that the musical exercises can help in terms of English pronunciation of certain vowels, sentence stress, intonation and overall rhythm of a sentence (similar view was given by Torras-Vila (2021), but did not significantly influenced words' stress in our examination. We may suppose that the lack in words' stress improvement was due to words that appeared in this example and were easy to pronounce because 8 out of 9 words were one-syllable words.

A rise followed by a fall (↗ ↘) as in alternative question *Was it a CD-ROM or a DVD?* should have shown that both alternatives were possible, only one of them could be the right one. In the recordings made in interview 1, we detected that 35 students out of 45, had problem with the rhythm of a sentence, intonation and pitch. In this case, students had difficulties in keeping the flow of a sentence without unnecessary breaks, which led to broken rhythm pattern. Further, these 35 students could not recognize that in this question we have a rise followed by a flow in intonation. In terms of pitch, the degree of lowness and highness of tone in each syllable was a struggle especially in mentioned words *CD-ROM* and *DVD*. Also, we noticed some miscues such as substitution (*a* for *the*, *was* for *what*, *or* for *of*) and rereading of individual words *CD-ROM* and *DVD*. The rereading could be explained by the fact that students use these words in Serbian, their mother tongue, but with a different pronunciation. This could be explained by the fact that the examined students transferred the reading strategy from the mother tongue (one letter-one sound) and failed to read English words mainly due to the negative transfer of their MT reading skills (Cirkovic-Miladinovic & Stanojevic-Veselinovic, 2020). After the musical exercises, 34 students out of 35 (who had problems in the first recording) improved their reading and pronunciation. Namely, the recordings of the interview 2 showed that students enhanced the rhythm of a sentence, intonation and pitch. Only one student was still reading a sentence with a miscue in terms of rereading. The rhythm was considerably improved, there were no breaks and pauses in the pattern and the flow was not interrupted. The intonation was also improved in the second recording, to be precise, the students paid attention to the fall in the second part of a question (34 students out of 35 who had problems improved in this category). The pitch was improved in words *CD-ROM* and *DVD* and the pronunciation was without miscues this time.

The next question is a three-fold example, a fall-rise followed by a fall (↘ ↗ ↘) as in *Are you hungry or do you want to eat later?* In this case both alternatives are possible, there is a possible assumption that the listener is hungry and this is marked by the rise of intonation in word hungry. In the interview 1, we recorded that 37 students (out of 45) had problem with noticing that there should be a rise in the middle of a sentence in order to stress the word *hungry*. Consequently, students struggled with the flow of a sentence and the rhythm pattern was often interrupted. Further, the intonation, as variation in pitch used to indicate the speaker's attitudes and emotions, and to regulate the flow of discourse, was not properly performed by the students. Therefore, in this recording we registered the lack of pitch accuracy as well. Besides, 37 students expressed some miscues while reading the sentence. The most common miscue was the mispronunciation of word *hungry* and the vowel *-u-* and there was an evident problem with the ending of a word later /ˈleɪ.tər/ where the consonant *-r-* in this word was very much stressed instead of being voiceless in British English (this is the variant of English the participants learn). Hence, this could be explained by the interference of a mother tongue, Serbian, where this consonant *-r-* is voiced rather than voiceless, as in English word *later*. In this interview, we also noticed miscues such as substitutions (*do* for *to*, *you* for *too*, *want* for *went*). It was evident that our participants needed some help and support in terms of reading the given sentences. After three weeks of musical exercises, we conducted the interview 2 which showed that there was a noteworthy improvement in intonation and 34 students (out of 37 who had problems) could easily recognize the intonation and the rhythm pattern 'a fall-rise followed by a fall'. As a result, the musical exercises led to more precise pronunciation, better sentence stress and pitch accuracy. Word stress was not an issue in the first interview so we could not record the improvement in this case.

Tag questions are highly interactive in that they may ask the range of possible responses from the speaker (Carter & McCarthy, 2006, p. 725). Some patterns are more constraining than others and these demand more precisely put stress and intonation on certain words or phrases (syntagms). Type *He's gone back, has he?*, contains an affirmative statement by the speaker in the main clause, and an expectation of a yes-answer as confirmation in the tag. In the subordinate clause - tag, *has he*, we expect the rising intonation in order to imply that we expect the affirmative answer (it is supposed that the speaker has some knowledge on his departure and expects the confirmation of the expressed assumption) (ibid.). Similar type *He didn't get it, did he?*, has a negative statement by the speaker in the main clause and a more neutral possibility (both are possible as answers, yes and no) in the tag. A rising intonation in the tag should anticipate agreement with no but open to challenge with yes (ibid.). Both examples have the rising intonation (↗) in the tag but students (38 out of 45) just couldn't recognize it. They read the sentence without a pulse and with the same intonation from the beginning to the end. The rhythm was broken and there was not an expected flow in reading. The pitch was proper due to the familiar words and short sentences. The recordings also indicated that the participants'

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pronunciation difficulties frequently consisted of wrong pronunciation of the abbreviation in present perfect tense *He's* and substitution with *his.* In these two examples, the running recordings indicated that there was a repetition of certain groups of words such as *He's gone, has he,* and *didn't get it*. In a slightly different type of question - *She never talked to anybody, did she?*, we have a negative statement by the speaker in the main clause, and an expectation of a no-answer as confirmation in the tag (ibid.). A rise (↗) in the main clause followed by a fall (↘) in the tag shows that the speaker expects agreement from his/her addressee. Somewhat different in intonation from the first two tag questions, this one showed in the recordings of interview 1 that, 38 students out of 45, could not recognize the fall in intonation in tag *did she.* Without this fall in the end, the speaker cannot express his/her expectation of an agreement from the other person. The interview 1 documented that the students in our sample, had difficulty in pronouncing of past tense affix *-ed-* and irregular past tense forms such as *gone*. These problems indicated that our students-participants needed help in reading, pronunciation and proper intonation. Therefore, musical exercises were carefully planned and conducted. Hence, the recordings of the interview 2 indicated that the musical exercises helped in terms of intonation in tag, rhythm of a sentence and pronunciation of verbs gone and talked in 36 out of 38 students who had problems in the first recording. The repetition of words was also solved and there was only one student who could not overcome this reading problem even after the musical exercises were applied. It is interesting to consider that musical exercises helped in this category not only in terms of intonation, rhythm and pronunciation but also in word stress, sentence stress and reading fluently without mentioned miscues.

B. Adjuncts

Adjuncts in the affirmative sentences were also examined and students' recordings were analyzed. The selected sentences had two adjuncts each and these were put after the main clause. In the example *We were working in the garden all morning*, we have two adjuncts, *in the garden* and *all morning*. Both can be read with a rising intonation (↗) in order to emphasize where they worked (*in the garden*) or to emphasize the time (*in the morning*). The emphasis depends on the reader/speaker and his/her emotional attitude towards the topical links between clauses and sentences. Weak forms are also sometimes a problem (as in research conducted by Dostal, 2013). After analyzing our participants' running recordings of the interview 1, we have observed the same intonation in the main clause and in both adjuncts. The students (39 out of 45) did not recognize that at least one of these adjuncts can be emphasized and thus the sentences could have more personal meaning. As a result, students struggled with the sentence intonation and its flow, so the rhythm pattern was lost. In this example sentence we did not record miscues or pronunciation problems due to very familiar words to the examined students. In the next example sentence with adjunct, *She played magnificently the second time*, the recordings showed that students also did not recognize that they can put emphasis on one of the adjuncts and to perform more competent reading and pronunciation. The intonation with the rising tone (↗) was not recognized by 39 out of 45 students, therefore, the speaker's attitudes and emotions were not showed in 39 examined students. The biggest problem in this example was the adverb *magnificently*. Being 5-syllable word, this one was often mispronounced, i.e. in 39 students out of 45, we recorded mispronunciation of the fourth syllable, so instead of /mægˈnɪf.ɪ.sənt.li/, where sound /s/ should be heard as dominant, it was often pronounced as /c/ which derives from Serbian spelling rule one letter-one sound. The variation in pitch was also not present in the example *An 18-year-old teenager was arrested in Cyprus yesterday*. The rhythm and flow were a struggle for the participants especially because of the compound syntagm *an 18-year-old teenager*. In this case, 39 students out of 45 made the one of the following miscues: 35 students mispronounced number 18 or the whole phrase, while 39 students could not overcome another obstacle i.e. the pronunciation of proper noun Cyprus /ˈsaɪ.prəs/. The first syllable was mispronounced and substituted, so instead of /ˈsaɪ.prəs/ examined students pronounced it as /ˈkiːprəs /. This could also be explained by the negative transfer of Serbian reading skills and pronunciation of the selected word. In the musical exercises, we have focused on the detected miscues and pronunciation problems. Therefore, these exercises tackled rising intonation in the following phrases and words: *all morning, magnificently, an 18-year-old teenager* and *was arrested* while in words *Cyprus* and *magnificently* the musical exercises were concentrated on substitutions and mispronunciation as types of miscue. After the musical exercises, we have conducted an interview 2 and recorded the participants' reading and pronunciation of the mentioned sentences. The records showed that there was a significant improvement in intonation in 39 students out of 45 in the first sentence *We were working in the garden all morning*. Specifically, 39 students managed to read the sentence with a rising intonation on the proper adjunct giving the intonation correct pitch accuracy and improving the rhythm pattern. In the second sentence *She played magnificently the second time*, 38 students out of 45 improved the pronunciation of word *magnificently* while the pronunciation of words *Cyprus* and number *18* was corrected in 39 participants. Overall, the rhythm was also enhanced in 39 students due to these corrections. In addition, the fluency, as the ability to read a text accurately, quickly, and with expression, was very much improved. Reading fluency in learning a foreign language is important because it provides a bridge between word recognition and comprehension (Brown, 1990). There was also a significant improvement in rhythm and sentence stress that led to more precise pronunciation and reading flow. Therefore, we believe that the participants will benefit from these exercises in the future as well and prevent comprehension problems due to mispronunciation.

C. If-Clauses

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According to Carter and McCarthy (2006, p. 748) if-clauses are often known and described as the first, second and third conditionals. In the first conditional, *If Sally comes too, there will be five of us*, the speaker/writer predicts a likely result in the future if the condition is fulfilled. In this sentence, in the interview 1, participants did not experience problems with pronunciation of separate words but 38 of them struggled with the rising intonation and rhythm pattern in the sentence. Also, the stress of the certain phrases was not recognized. Hence, the musical exercises put a focus on these recorded problems and tried to tackle the rising intonation in phrases *If Sally* (↗), *will be* (↗) but to practice and signal the fall of intonation in *five of us* (↘). Stress, as the degree of force or loudness with which a syllable is pronounced, was significantly improved after the musical exercises, that is, 36 out of 38 students in the interview 2 showed improvement in this segment together with the enhanced intonation (the rising and falling intonation was applied in the proper phrases and the stress pattern was just right). In the example of the second conditional, *I would do a computer course if I had the time*, the speaker/writer responds to a possible or hypothetical situation by indicating a possible outcome (ibid.). In this case, the condition must be fulfilled in order for the future to be different. In the interview 1, students running recordings indicated that there was again the lack of rising and falling intonation in phrases *I would do* (↗) and *if I had* (↗) in 37 students-participants. There was another evident problem, 34 students mispronounced a vowel cluster *-ou-* in word course /kɔːs/ so instead of /kɔː/ the participants pronounced it as /kɒrˈ/ as in word *the Qur'an*. Similar results were found in research by Habibi (2016). However, these pronunciation problems did not result in comprehension problems but it was evident that the negative transfer of MT, Serbian reading skills (one-to-one letter-sound correspondences) was applied. Having in mind all previously recorded problems in our sample, the adequate musical exercises were designed for the purposes of improving the participants' pronunciation and intonation of the selected sentences. Therefore, the musical exercises were applied and in the interview 2 we have recorded an improvement in 36 students out of 37 in terms of intonation and 32 students improved their pronunciation and stress of the word *course*. It may be said, that the musical exercises helped the examined participants to overcome the intonation problem, that is, to recognize where to have a rising intonation and where not. Not only the participants improved the intonation in reading the given sentences but also they did not make unnecessary discontinuation between words, on the contrary, the rhythm pattern was appropriate and such a rhythm gave a deeper meaning to the sentence. The third example, *If I had seen you walking, I could have offered you a lift*, represented an example of the third conditional where the speaker/writer is expressing the attitude towards an imagined past situation. Here the speaker or writer is talking about a past event which did not happen, and therefore things are different from how they might have happened (ibid.). The interview 1 recordings showed the same situation as in the previous examples. Namely, the students-participants struggled with the rising intonation and rhythm pattern in the sentence. So, 38 students out of 45 could not recognize the rising intonation (↗) in phrases If I had seen you and *I could have offered*, on one hand, and the falling intonation in *walking* (↘) and *you a lift* (↘), on the other. No problem was noted in terms of pronunciation of certain syllables or whole words. This could be explained with the fact that all the words were familiar to students and the longest words were 2-syllable words. Again, the musical exercises were focused on the recorded problems in reading and the overall improvement of the students' sentence stress, rhythm and intonation. After some time of practice of specially designed musical exercises, students' running recordings showed that there was a significant improvement in intonation in 36 out of 38 students. In other words, students were more confident to express their emotions towards the situation in the sentence through applying the rising or falling intonation and consequently the rhythm pulse was more of a natural speech. Becoming a more confident speaker is crucial in the university classroom because only then students can make progress and improve their English language speaking skills (Ćirković-Miladinović, 2019). It may be said that, reading skills and pronunciation in the interview 2 showed that students were able to apply the gained experience in musical exercises and to improve the melody of speech. Here, music and English as a foreign language were correlated for the purpose of improving reading and pronunciation skills in students/participants and to give the prominence of speech melody.

IV. Pedagogical Implications

The results showed that the 45 examined participants experienced pronunciation and reading out loud problems in all three main categories – *questions, adjuncts* and *if-clauses.* If we take into consideration 4 sub-categories, intonation, rhythm, pitch and stress, as well, we may say that after the music exercises, the results were as follows: question pronunciation and oral reading, together with intonation, rhythm and miscues, were corrected in 35 out of 38 students (92.11%) in terms of *alternative questions*; 34 students out of 37 (89,4%) improved their pronunciation, intonation, word and sentence stress in favour of tag questions; *adjuncts in the affirmative sentences* showed that 38 out of 39 students improved their intonation recognition, overall rhythm of a sentence and miscues were eliminated as they were at least 97.4% accurate in their oral reading; in case of *if-clauses*, recordings of our sample showed that 36 out of 38 students (94.7%) made an improvement in terms of intonation, pitch, rhythm pattern while miscues were still present in only 2 students. It can be deduced from these results that specially designed musical exercises may help in the English language classroom. While working on musical aspects, the participants focused on oral skills and pronunciation and gained new insight into pronunciation practice that help them acquire the foreign language (English) pronunciation more easily. "Contextualized English learning through musical activities and skills, thus, seems to contribute positively to the acquisition of vocabulary, structures and pronunciation in the TL" (Torras-Vila, 2021). In line with the mentioned

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research, on a more positive note, we believe that these exercises have proven, in our research sample, to be useful in several aspects: word and sentence stress, pitch accuracy, rising and falling intonation, rhythm pattern and overall reading fluently with a minimum of the mentioned miscues.

V. Conclusion

Music has always played a big part in people's life and it has been present in the classroom and out of it. Nowadays, young language learners meet with foreign language songs and chants even before they start school. If we consider university students and their learning of the foreign language, it seemed that this study proved that musical exercises were useful and productive in terms of pronunciation and oral reading in many aspects. The participants in this study perceived music as motivating source, thus beneficial in language learning. The musical exercises brought interesting changes in the classroom and boosted learning activities. Additionally, many students-participants felt nervous in the beginning but later they were more confident and self-assured in improving their pronunciation and sentence stress. Specially designed melodies and exercises proved to be a good method of English language pronunciation activities, therefore these tunes infiltrated students' thoughts and may stay in their memory for a long time. Furthermore, what also speaks in favour of the mentioned musical exercises in language teaching are the results from the study. The outcomes of the interviews recorded after the musical exercises presented that the most students achieved better results in terms of correct pronunciation, balanced intonation, unbroken rhythm pattern and right pitch. To conclude, the authors have shown that participants in this sample benefited from specially designed musical exercises, but do not negate that pronunciation and oral reading should be seen as developmental skills that need time and proper teaching methods in order to grow. The research can be expanded in the future by using the proposed model based on common elements of language and music and their integration in search for other possible approaches in teaching English at the university level.

Appendix Sentences in English

A. Questions

1. **Could you go and work in France or Italy**?
2. **Was it a CD-ROM** or a DVD?
3. Are you **hungry or** do you want to eat later?
4. He's gone back, **has he**?
5. She never talked to anybody, did she?
6. He didn't get it, **did he**?

B. Questions Adjuncts in the affirmative sentences:

1. We were working in the garden **all morning.**
2. She played **magnificently** the second time.
3. **An 18-year-old teenager was arrested** in Cyprus yesterday.

C. If-clauses

1. **If** Sally **comes** too, there **will be** five of us.
2. I **would do** a computer course **if** I **had** the time.
3. **If I had seen** you walking, **I could have offered** you a lift.

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