

Primary school teachers opinions on effective use of music in language and speech development of autistic children

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Abstract

The use of music helps with autism as in: the development of language and communication, cognitive, emotional skills. Music as a tool should be used in schools so that teachers and assistants incorporate music to improve communication skills. The purpose of this study is to obtain the views and practices of teachers and assistants on how music affects the development of language and communication in students diagnosed with autism. This research was carried out with 6 teachers and 6 assistants of autistic students of elementary schools, grades (1-5), with the aim of including music in the development of communication. The research methodology is oriented to the review of local and international literature that deals deeply with this topic and with the use of semi-structured interviews with teachers and assistants of elementary schools in Kosovo. After carrying out the research, obtained satisfactory results that argue our topic that music is a tool that develops communication in students with autism. Although teachers and assistants encounter some challenges during the teaching process, they still apply comprehensive practices, methods and new contemporary strategies by applying music as a tool that helps develop language and speech in autistic students. The recommendations in this study are addressed to relevant institutions that aim to support the work of teachers and assistants and the improvement of practices related to the development of language and communication through music in the framework of primary education.

Keywords

autistic children, elementary school, language and speech development, music, primary school teacher

Introduction

A large number of authors have given their opinions regarding the aspect of language and speech development in children diagnosed with autism and have emphasized that music plays an important role in identifying and evaluating the development of spoken language and communication. Different researchers, based on reality and their perspectives, present music as an effective tool. Based on what we highlighted above, we can say that inclusive education is a learning environment that enables access, accommodation and support for all students, regardless of their physical, intellectual, social, emotional, linguistic or other conditions (Sylva, 2023).

The educational system has the potential to provide quality education for all individuals and rise above the stigma

that still exists in society, otherwise, the educational system can perpetuate inequalities related to gender, ethnicity, class or disability (Beckett, 2009). Autistic children live behind spoken language, therefore in schools teachers or even assistants must promote communication through methods, differentiated teaching and work strategies or through different musical tools. According to Moneva and Bacante (2020) teachers are the main factors for stimulating communication, therefore, teachers are competent persons who create effective, fun, stimulating lessons in suitable environments, are better managers, through inclusive environments create their lessons based on music, they play a very important role in conveying competences to their students.

The contemporary changes that have been taking place in recent years, especially

with the development of technology, indicate that the inclusion of children with special needs is at a satisfactory level, and I say this due to the fact that with the use of technology, students with autism develop communication through various applications. They also use music, various educational games, singing, which have a positive effect on the inclusion of children with special needs (Lee and Chang, 2021).

It is very important to identify the early presentation of speech difficulties in autistic children, because the absence leads to other emotional, cognitive, socialization and comprehensive problems. Therefore the interaction between language and communication difficulty and presentation of emotions is very important for early identification (Sturrock, Chilton, Freed and Adams, 2022). Based on this, we understand that the earlier the identification happens, the more successful the hopes are for avoiding the difficulty.

Literature Review

Inclusion of Autistic Students in School Activities Through Music

The use of music is known for effective results in the learning process within the classroom, while the rhythm helps them to calm down and self-control their behaviors. Therefore, through music, children with autism express their emotions better, develop their speech and participate in educational activities within the school as well as extracurricular activities.

Teachers and teaching assistants can use music as a reward because music can generally be enjoyed by each individual, professionals should encourage parents to carefully evaluate the use of music as a treatment for language and speech development in children with autism. Music can have a powerful impact on autistic people because it functions as a vehicle of interaction, social and emotional development without the necessary involvement of verbal communication (Quintin, 2019). There is

evidence that in some individuals with autism, the lack of adequate language and communication skills may be related to other issues ranging from social-cognitive to skills (Samy, Osman and Selim, 2012).

Communication and social interaction are considered among the main areas of difficulty for people with autism. Music can be used to enable communication and expression to facilitate addressing the essential needs and requirements of autistic people. Music as a therapy has been applied to people diagnosed with autism since the beginning of 1950, but its applicability, especially in educational institutions, differs from the place and environment where the student learns. Music has an extraordinary ability to express, transmit, evoke emotions, it has an impact on the intellectual, social, personal development, psychological wellbeing of all children without distinction even those with special needs (Blasco-Magraner, Bernabe-Valero, Marín-Liébaná and Moret-Tatay, 2021) children with autism, down syndrome, behavioral disorders, visual impairments, physical and intellectual impairments, etc. (Meyer, 2017).

The Link Between Music and Autism: Language and Communication Development

Numerous studies support the idea that children with autism can develop their emotions and feelings through listening to music, as well as stimulating communication, thus helping to improve their skills for life. In Kosovo, the education of children with special needs began to be organized in pre-school institutions, special schools, resource centers, regular classes, attached classes, which function within the framework of regular schools in which supporting educators, assistants/ and for children with special needs, supporting teachers, as well as operationalized municipal support teams for assessment. Children with special needs in Kosovo are included in the regular classroom, receiving support from assistants and support teachers (Ministry of Education, 2010).

Several treatments for people with autism and treatment plans depending on their individual needs have been around for years. As autism is on a developmental spectrum, early interventions are essential in improving symptoms, learning and development (Ospina et al., 2008).

Musical integration, interaction in educational activities have shown positive effects on children with ASD (autistic), such as emotional engagement, social interaction, communication, child-parent relationship, suggesting that musical activities can lead to positive changes (Sharda et al., 2018). It is important to note that one of the first signs of early identification of autistic children is communication, which according to many studies has been identified somewhere around the age of 3 years, and then two other areas such as social interaction and play. Autistic children are affected in three crucial areas of development, which are sometimes called the triad of impairments in verbal and nonverbal communication, social interaction, and imaginative or creative play (Liaw and Dani, 2013). Results from some researches showed that even children with autism (ASD) show their innate abilities through music, which helps to increase the social skills of these children (Bharathi, Vellingiri and Venugopal, 2019). For children with autism, interacting with others can be difficult, especially when speaking. However, when they have a musical instrument in front of them, they connect with that instrument, so they will be freed to communicate.

The Influence of Elementary School Teachers on The Effective Use of Music in Children with Autism

For a long time, music has been regarded as a special therapy which has supported children who have not had the development of language and communication, therefore teachers now, even with the inclusion of assistants with technological aids, have given positive results to students with autism. Based on what was elaborated above, precisely for this reason, it is recommended that teachers in the classroom use light sounds

of music, which gives a positive effect on communication, adaptation, socialization. Some researchers have suggested that children are more likely to stay calm when listening to soft music in the classroom when they are doing an activity within the regular curriculum.

So, students experience emotional support from the teacher, assistant or friend in the class, and with the use of music they understand their feelings and thoughts better, learn to communicate with others, learn to express their emotions, modify their behavior as well as being included in society. Through acoustic stimuli, students reduce anxiety, change behavior and increase self-confidence. In this way, music helps autistic students to learn the articulation of words.

Various teachers have used music to change the emotional mood of students, the integration of music education is seen as an integral part of communication with children, children like to listen to music, sing, perform. It is suggested that music should be part of school classrooms as it encourages children to participate in classroom activities that help inclusion (Sze and Yu, 2004).

Teachers and assistants who work in primary schools must follow different programs and trainings in order to provide support to students who have autism and who have very few words identified in their vocabulary. Several professional learning programs that support teachers in using the development of inclusive practices have been documented.

In recent times, teachers are increasingly using technological tools - various applications in the learning process, and it may be very normal for future teachers to use these applications in their daily teaching including: games, stories, technological simulations, get answers online, etc. in appropriate inclusive environments for an effective teaching (Camilleri and Camilleri, 2019). One study explored the perceptions of teachers who had participated in a professional learning program in which

teachers collaborated with an artist in his home (Hunter, Baker and Nailon, 2014).

Research Problem

Our research is aimed at discovering the impact of music on the development of language and speech in students with autism. The study conducted by Manning says that music is too important to be used as a comprehensive tool (Manning, 2016). This research is qualitative based on the study of (Matthews & Ross, 2010). To obtain the opinions of teachers and assistants, 5 open questions were included in the semi-structured interview. After collecting the data, we took it, coded it according to the target variables, and generated the data according to age, gender, work experience, which we coded with special numbers (Kumar, 2017).

The main research problem:

- What are the opinions of primary school teachers about the relationship between music and the development of language and speech in autistic students?

The sub-problems are:

- What are the opinions of primary school

teachers about supporting the curriculum in the development of language and speech through the effective use of music?

- What are the challenges faced by teachers in the implementation of music in school?

- Which of the subjects correlates with music in the development of language and communication?

Participants

In this study, we selected 4 primary schools in the Municipality of Gjilan, teachers and assistants who have students with autism in their classes were selected. A semi-structured interview was used with the participants involved in the research to collect qualitative data. 12 participants took part in the study, 6 of them teachers and 6 assistants who work with children with autism. The sample used in this research was purposive.

Table 1 shows the codes used for each participant; for example, P1-F-27 Refers to P- for teachers, assistants, 1 - for the enumeration of participant; F/M - gender and 27 - age.

Table 1. Structures of Participants

Participant No	Gender	Age	Work Eksperience	Code
P1	Female	27 years	3 Years	P1-F-27
P2	Female	30 Years	2 Years	P2-F-30
P3	Female	33 Years	2 Years	P3-F-33
P4	Female	29 Years	3 years	P4-F-29
P5	Female	31 Years	1 Years	P5-F-31
P6	Female	26 Years	15 Years	P6-F-26
P7	Male	44 Years	2 Years	P7-M-44
P8	Female	34 Years	8 Years	P8-F-34
P9	Female	32 Years	15 Years	P9-F-32
P10	Female	33 years	9 years	P10-F-33
P11	Male	29 years	1 years	P11-M-29
P12	Male	27 years	2 years	P12-M-27

P1-P6: Primary school teacher, P7-P12: Assistant to students with autism

Semi-structured Interview Form

The semi-structured interview was conducted with 12 participants, 6 of them teachers and 6 assistants of students with autism in elementary schools (grades 1-5). In order to explore this topic as much as possible, we collected research data through a semi-structured interview with teachers who work with students with autism in elementary schools in Kosovo and personal assistants of these students. The data obtained from the semi-structured interview were presented anonymously (See Appendix1)

We also used the pedagogical documentation within the school such as: the Individual Education Plan to see the learning results in the Albanian Language subject as well as the Class Diary to evaluate the student's achievements in the Music and Albanian Language subject.

Data Analysis

The data analysis was carried out through the qualitative method which deals with social scientific research, this method allows us to collect and process qualitative data and then interpret the result of these data. Then, after collecting the data from the research through the qualitative method, we assigned codes to the participants. For our research we took examples from Kumar's book, the data that we have presented in the research, we have generated them through special qualitative categories, age, gender, work experience, which we coded with special numbers (Kumar, 2017).

Ethics

To carry out this research in the primary schools of the Municipality of Gjilan, we requested permission from the Municipal Directorate of Education (DKA) in Gjilan on August 25, 2023. All the intended participants in the research were invited to the interview formally and without being imposed they willingly participated in this research.

First, we informed them about the topic and importance of this research, and we

informed them that their participation is free and not obligatory. All participants agreed to participate in the research voluntarily. The participants in the research were kept confidential and were informed that in our research they will be presented with codes as in table 1.

Procedure

The research was carried out through a semi-structured interview with 6 teachers of classes (1-5) of Primary Schools in the Municipality of Gjilan ("Abaz Ajeti" Primary School, "Rexhep Elmazi" SHFMU, "Thimi Mitko" SHFMU, "Musa Zajmi", as well as 6 personal assistants of students with autism from these same schools. The teachers were interviewed separately from the assistants and they felt comfortable during the interview. The interview took place during the months of September-October in the schools where the students study and the teachers and assistants work. Interviews we carried them out before the beginning of the lesson so that teachers and assistants do not get in the way of the teaching process. The response to the realization of the research by the Municipal Directorate of Education was made after our request where they also gave consent for the research on August 25, 2023.



Photo 1. Image of the comprehensive activity through music in the subject of the Albanian language, “Abaz Ajeti” Elementary School, Gjilan, Grade 4-5)

Results

Interviews with primary school teachers and teaching assistants who have students with autism in their classrooms were conducted in order to provide a general description of the relationship between music and language and speech development in students diagnosed with autism. The interviewees gave their perceptions of how prepared they are for the use of music as an effective tool in the development of communication, then there was a discussion about the curriculum, difficulties and challenges of including children with autism in primary school.

From the interview conducted with teachers and assistants, these were some of the topics we discussed:

- Adequate preparation of teachers and assistants in the use of music
- Academic achievements in working

with students with special needs (autistic students)

- Curriculum - applicability of music as an effective tool
- Challenges in achieving learning outcomes for students with autism
- Suggestions.

Professional Preparation

This part presents a summary of the professional preparation of teachers and assistants regarding the use of music as a tool that directly affects the language development of children with autism, as well as the attendance of seminars or trainings in the field of comprehensive education.

Theme 1. Teachers and assistants' knowledge level of teaching music to autistic students

Table 2. Content analysis of Kosovar teachers and assistants views about their knowledge level of teaching music to autistic students

Theme 1. Teachers and assistants' knowledge level of teaching music to autistic students	f
Modified materials	4
Collaboration with an inclusive expert	3
Seminar	2
Involvement of the speech therapist in the school	2
Training	1

“Regarding my professional preparation, i think i am ready to face the challenges, but the presence of a speech therapist in the school is necessary, so that we can have an easier development of communication in autistic children” (P7-M-44, P3-F-33).

“During my studies, we only have one subject in the field of inclusive education, now that i have students with autism in my class, i find it very necessary to attend a seminar, because even the modified materials I could not prepare without the help of the support teacher” (P2-F-38).

“We have knowledge about the effect of music on the development of communication in autistic students, but I believe that any training would have an

impact on positive results in the work we do and it would certainly be welcome and also this study would serve a lot” (P3 -F-22, P4-F-46).

In the first question, teachers and assistants agree that the use of music in the classroom brings positive results and to achieve these results it would be helpful to include an expert in the field of inclusive education, so that they know more about the methods, the modification of individualized materials. Therefore, they emphasize that following some training in the field of inclusive education, including subjects such as: Music, Albanian language, would ease our challenges during teaching.

Theme 2. Relation of subject selection and engagement to course for language and communication development

Table 3. Content analysis for relation of subjects selection and engagement to course for language and communication development

Theme 2. Relation of subject selection and engagement to course for language and communication development	f
Physical education	6
Mathematics	6
Figurative gold	4
Albanian language	3
Music	1

The teachers and assistants gave their answers supporting the subjects which are more structured and especially the subject of Music because it is more attractive for the students, they also mentioned that the subjects during their practical work with autistic students have given positive effects in the development of language and speech are: Music, Albanian Language, Mathematics and Physical Education.

“My experience of several years in education has shown me that subjects that include structured and appropriate elements tend to help promote and develop communication. Some of the subjects that have succeeded in this

direction include the subject of Music and Physical Education” (P1-F-40)

“During my experience with autistic students, the subject of music and mathematics encourages communication more because during the lesson when they have music, they start having fun and socializing with their peers, thus communication is encouraged” (P3-F-22)

“During the practice of my several years of work with autistic students, I think that subjects such as Albanian language and mathematics have given more effect on speaking (counting, naming figures, dancing, singing)” (P6-F-29)

“I think it has an impact on the subjects of Albanian Language, Music, Art, Mathematics” (P3-F-35, P4-T-29, P5-T-25, P6-F-20)

the subject of music has an effect on the development of communication in students with autism” (P6-F-20).

“During my 15 years of work in education, I can say with complete certainty that

Theme 3. Implementation music for language and communication development in the primary school curriculum

Table 4. Content analysis of teachers and assistants views about including music in the primary school curriculum for language and communication development

Theme 3. Implementation music for language and communication development in the primary school curriculum	f
The curriculum supports the use of music in the development of communication	12
Curricula	5
Songs that can be combined with other subjects	4
Language and communication	2
Drawing	1

During the interview, the teachers and assistants were very much in agreement that the curriculum supports the use of music in the classroom, and especially the correlation it has with the Albanian language subject suggests that the students manage to develop communication.

“Yes, they are interconnected” (P4-M-29)

“Yes, these two subjects are related to each other and the curriculum is very adapted since the first principle in the Curricular Framework is the principle of inclusiveness, therefore students with autism have their learning outcomes modified and adapted to their abilities and needs that they have”(P4-F-46)

“I think that the curriculum supports it,

since subjects such as: Music, Albanian language, Physical Education and Mathematics are related to each other. During practice at work, we try to p. such as the names of animals, trees, vegetables, let’s practice them in music lessons, as well as numbers, colors and other units, we try to make them more real in relation to the subject of music because it also gives a positive effect on the development of language and speech as and it is very fun for students with autism” (P5-M-25)

“Yes, music and the Albanian language are related” (P1-F-40).

Theme 4. Difficulties in inclusion autistic students in school activities while using music

Table 5. Content analysis of teachers and assistants views about the difficulties in the inclusion of autistic students in school activities while using Music

Theme 4. Difficulties in inclusion autistic students in school activities while using Music	f
Space	6
Music cabinet	6

All interviewees agreed that they encounter some difficulties during practical work with students with special needs, however, they indicated that they are always prepared

to cooperate with colleagues in order to overcome challenges.

“We try to adapt to the place and space where the activity is organized” (P1-F-40)

“In the school where I work during practical work, we encounter difficulties because the music cabinet is missing, therefore the music lesson does not become attractive for students” (P1-F-27)

“I think that a suitable environment would offer us positive results in the acquisition of communication by applying the subject of music, and our school meets all the conditions” (P2-F-38)

“At school, I personally don’t have any difficulties because we cooperate very well with the assistant and the school management in involving students in school activities, especially during the June 1st holiday” (P3-F-35)

“During my work as an assistant at the beginning I encountered many difficulties until I managed to find the ability that my student had in music, piano performance, she is now in the fifth grade and has been enrolled in the music school for two years” (P2-F-42)

“The first time I had a student with autism was in 2018, and thanks to the sounds of music I was able to quickly integrate the student into the classroom, the student has not spoken a word and through music I was able to promote communication, she now communicates about her needs personal”(P5-T-25).

Të mbledhim të gjithë nga një dru (Let’s all plant from one tree)

Dua Rasimi

Të mbje-llim të gjith'nga një pem' e çdo pem' të sjell'një zog e e çdo zog të
A - jër të pa-sur në mush -k'ri e çdogjeth' me jet' të vet, plu-hu-rin mbi ty

11
sjell'një këng' e çdo këng'një kë-na-që - si. Ve-tëm du-het pak kuj-des pak kul-tur'e
e e pret si omb -rell që t'ke_shën-det.

20
pak vull- net... e të sje-llim ma - lin n'qy - tet Do ti dë-gjojm

26
ci - u ci zogjt'e tu e zogjt'e mi ve-tëm du-het pak kuj - des

Figure 1. “ Let’s all plant from one tree” Dua Rasimi

Theme 5. Suggestions for the use of music in the development of language and communication of autistic children

Table 6. Content analysis of teachers and assistants view about suggestions for the use of music in the development of language and communication of autistic children

Theme 5. Suggestions for the use of music in the development of language and communication of autistic children	f
Lack of cabinets	12
Individual therapy	12
Musical instruments	6
Musical instruments	6
Awareness of parents	5
Therapist	4
Technological tools	3
Assistants for children with special needs	2
Lack of individualized materials	2
Professional support	1

The teachers and assistants in the last question gave their suggestions for the inclusion of students with autism in activities such as in the classroom, school or even in extracurricular activities through music in order to develop speech and communication through these activities, they suggested that in schools a speech therapist is included as well as holding activities with an Albanian Language and Music expert.

“Involving students with autism in the development of language and communication through music is an excellent opportunity to help them develop their skills in this direction” (P1-F-40, P2-F-38, P3-F-35 , P4-T-29)

“I think that every teacher who has students with autism in his class should have suitable conditions for the use of music because it helps communication through the correlation it has with other subjects, as well as the inclusion of speech therapists in schools is quite necessary” (P5-T -25)

“I suggest that some of the subjects include the subject of music because it

calms and relaxes students with autism” (P6-F-20)

“In classes where there are students with autism, I suggest that there be as many musical instruments, posters, technological tools, sound, to make it as easy as possible to include students with autism” (P1-F-27)

“This research, which is being developed, will be of great help to us in the future, so I suggest that through the publication of the work, they convey messages that autistic children communicate using music, and this I am speaking from my experience at work” (P2-F-42)

“I suggest that in the future there will be experts in the field of psychology and music who can hold individual therapy with students with autism” (P3-F-22)

“My suggestions are as much as possible involvement of autistic students in activities, because they feel satisfied and are more stimulated to communicate, especially with their peers” (P4-F-46)

“I think that music should be used more with children diagnosed with autism, as it has been proven to reduce anxiety and promote communication” (P5-F-46, P6-F-29).

Conclusion and Discussion

The study aimed to further explore how music affects the development of language and communication in students diagnosed with autism. In this study we researched various literature related to this issue and conducted a semi-structured interview with teachers and assistants of the primary schools included in the study.

The interviewed participants showed that they are prepared in terms of the approach of children with autism, but still express their willingness to attend trainings and seminars.

Regarding the connection of music as a tool that develops language and communication in students with autism, the findings of (Gold, Wigram and Elefant, 2006), show that music therapy can help children with autism improve their communication skills, but also pointed out that more research was needed to detect the effects of music therapy over longer observation periods. Although teachers and assistants encounter some challenges during the teaching process, they still apply comprehensive practices, methods and new contemporary strategies by applying music as a tool that helps develop language and speech in autistic students

This study brought findings that Kosovar teachers and assistants of students with autism use music as an effective tool for students with special needs based on the needs and abilities of the student as well as depending on the classroom situation. We have similar facts from the authors (Kivijarvi & Rautiainen, 2021), stating that teachers rely on the use of music as part of Finnish in comprehensive education.

The challenges of teachers and assistants of students with special needs were mainly of

a technical nature such as: increasing the number of support teachers, assistants based on the identified number of students with autism, musical instruments, technological materials, cabinets, although in reality all the involvement was at a satisfactory level especially when they use music. While the study of (Davys , Gonçalves Moreira, Tymoshchuk and Marques, 2021) instruments and technologies are accessible to everyone. Portugal is the opposite of our country, which is faced with replenishment of funds.

This research provided a database for the situation of comprehensive school practices and it was concluded that based on the interview and research done by different authors that music is the subject that develops speech and language in autistic students.

Recommendations

Recommendations for Researchers

- This research was conducted to describe the current situation in accordance with a case study design. In the future, larger-scale survey research can be conducted on the use of music in the development of language and communication skills of children with autism in Kosovo.
- The research focused on the use of music by primary school teachers in language and communication development, which is the most important developmental area of children with autism. In future studies, research can be conducted on other developmental areas.
- In the study, primary school teachers' opinions about the use of music in the development of language and communication skills of children with autism were taken. In future studies, primary school teachers' musical use proficiency in inclusion of students with special needs can be investigated.

Recommendations for Practitioners

- Based on the literature reviewed for this study, we recommend to the highest authorities that schools in Kosovo be equipped with cabinets, musical instruments, didactic tools, audio-visual tools, so that they are provided with a creative environment.
- Responsible institutions in Kosovo should increase the number of support teachers and assistants according to the number of students with autism, as well as include a music professional within the Municipal Support Team.
- Teachers are the fundamental factor in the realization of the learning process, therefore they must be continuously qualified to use effective strategies of inclusion and management of classes where autistic students are included.
- The school is the only institution that works directly with students with special needs. Therefore, there should be more activities at school for these students, especially students diagnosed with autism, so that through the use of music communication develops, so these children should be more involved in school activities, for example, on the school day, extracurricular programs.
- Awareness campaigns should be planned and carried out in schools to fight prejudice, inviting people with autism and experts in the field of music and speech therapists.
- Schools should be equipped with cabinets and musical instruments so that the skills of students with autism can be developed with the help of these tools, especially wind instruments, in order to stimulate communication in these students.

4 schools in the city of Glijan and the 2023 academic year.

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Limitations of the Study

This study is limited to 6 primary school teachers and 6 assistant teachers working in

References

- Beckett, A. E. (2009). Challenging disabling attitudes, building an inclusive society: Considering the role of education in encouraging non-disabled children to develop positive attitudes towards disabled people. *British Journal of Sociology of Education*, 30(3), 21-28. <https://doi.org/10.1080/01425690902812596>
- Bharathi, G., Vellingiri, B., & Venugopal, A. (2019). Music therapy as a therapeutic tool in improving the social skills of autistic children. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, 55(1), 1-6. doi:doi:10.1186/s41983-019-0091-x
- Blasco-Magraner, J. S., Bernabe-Valero, G., Marín-Liéñana, P., & Moret-Tatay, C. (2021). Effects of the Educational Use of Music on 3- to 12-Year-Old Children's Emotional Development: A Systematic Review. *International Journal of Environmental Research and Public Health*, 18(7), 1-29. <https://doi.org/10.3390/ijerph18073668>
- Camilleri, A. C., & Camilleri, M. A. (2019). Mobile Learning via Educational Apps: An Interpretative Study. *Association for Computing Machinery*, 5(1), 27-29. doi:DOI:10.1145/3337682.3337687
- Davys , M., Gonçalves Moreira, A. d., Tymoshchuk, O., & Marques, C. (2021). Finding solutions to promote the inclusion of children with Cerebral Palsy in Arts Education Programmes of Music. an integrative literature review using webQDA. *Indagatio Didactica*, 13(3), 537-558. <https://doi.org/10.34624/id.v13i3.25599>
- Gold, C., Wigram, T., & Elefant, C. (2006). Music therapy for autistic spectrum disorder. *Cochrane Database of Systematic Reviews*, 19-22. <https://doi.org/10.1002/14651858.CD004381.pub2>
- Hunter, M. A., Baker, W., & Nailon, D. (2014). Generating cultural capital? Impacts of artists-in-residence on teacher professional learning. *Australian Journal of Teacher Education*, 39(6), 75-88. <https://doi.org/10.14221/ajte.2014v39n6.4>
- Kivijarvi, P., & Rautiainen, S. (2021). Contesting music education policies through the concept of reasonable accommodation:Teacher autonomy and equity enactment in Finnish music education. *Research Studies in Music Education*, 43(2), 91 -109. <https://doi.org/10.1177/1321103X20924142>
- Kumar, R. (2017). *Research methodology*. Pristine: USAID & MASHT.
- Lee, L., & Chang, H. Y. (2021). Music technology as a means for fostering young children's social interactions in a inclusive class. *Applied System Innovation*, 4(4), 2-13. <https://doi.org/10.3390/asi4040093>
- Liaw, J. H., & Dani, N. A. (2013). Asperger's syndrome in autistic children and their modes of learning through. *Australian Journal of Basic and Applied Sciences*, 7(4), 667-675,.
- Manning, I. (2016). *Music for all: supporting students with special needs in the music Classroom*. Toronto: University of Toronto. Retrieved from <https://hdl.handle.net/1807/72239>
- Matthews, B., & Ross, L. (2010). *Research methods*. Tirane: CDE.
- Meyer, J. (2017). *Music education with autistic students in the mainstream elementary classroom*. Toronto: Department of Curriculum, Teaching and Learning Ontario Institute for Studies in Education of the University of Toronto. <https://hdl.handle.net/1807/77125>
- Ministry of Education, S. a. (2010). *Strategic plan for the organization of inclusive education*. Pristina: Ministry of Education, Science and Technology.

- Moneva, J., & Bacante, W. (2020). Student Interest: Music or Studies in School. *Journal of Gifted Education and Creativity*, 7(1), 41-48. <https://dergipark.org.tr/en/pub/jgedc/issue/52403/685966>
- Ospina, M. B., Seida, J. K., Clark, B., Karkhaneh, M., Hartling, L., Tjosvold, L., ... Smith, V. (2008). Behavioural and Developmental Interventions for Autism Spectrum Disorder: A Clinical Systematic Review. *PLoS ONE*, 3(11): e 3755. <https://doi.org/10.1371/journal.pone.0003755>.
- Quintin, E. M. (2019). Music-Evoked Reward and Emotion: Relative Strengths and Response to Intervention of People With ASD. *Frontiers in Neural Circuits*. <https://doi.org/10.3389/fncir.2019.00049>
- Samy, K. L., Osman, D. M., & Selim, M. H. (2012). Communication skills, sensory integration functions, and auditory brainstem response: findings in a group of Egyptian children with autistic features. *The Egyptian Journal of Otolaryngology*, 28, 117-126. <https://doi.org/10.7123/01.EJO.0000413494.24410.1f>
- Sharda, M., Tuerk, C., Chowdhury, R., Jamey, K., Foster, N., Blanch, M. C., ... Hyde, K. (2018). Music improves social communication and auditory-motor connectivity in children with autism. *Translational Psychiatry*, 8, 2-13. <https://doi.org/10.1038/s41398-018-0287-3>
- Sturrock, A., Chilton, H., Freed, J., & Adams, C. (2022). In their own words: The impact of subtle language and communication difficulties as described by autistic girls and boys without intellectual disability. *Autism*, 26(2), 332-345. <https://doi.org/10.1177/13623613211002047>
- Syla, M. (2023). *The influence of peers on the socialization and educational development of students with special needs*. Prishtine: Lena Grafik.
- Sze, S., & Yu, S. (2004). *Educational benefits of music in an inclusive classroom*. Online Submission, 1-3. <https://files.eric.ed.gov/fulltext/ED490348.pdf>

Appendixes

Appendix 1. Semi-structured Interview Form

Semi-structured Interview Form	
<p>Explanation: The purpose of this study is to investigate the role of music as a comprehensive tool: “The connection between music and the development of language and speech in autistic children”. The answers received from you will help us draw the results for this research. All answers will remain confidential and will be used only for the needs of this research..! Thank you for your cooperation.!</p>	
<p>Gender: Female(<input type="checkbox"/>) Male (<input type="checkbox"/>)</p>	<p>Age:...</p>
Questions	
<p>Question 1. How prepared are you for using music as an effective tool for the development of language and communication in children with autism?</p>	
<p>Question 2. During your experience with autistic students, explain to us which of the subjects encouraged and developed communication?</p>	
<p>Question 3. Does the primary school curriculum support the use of music in the development of language and communication?</p>	
<p>Question 4. Do you encounter difficulties in involving autistic students in school activities when you use Music? If so, please clarify these problems (materials, educational environment or school management)?</p>	
<p>Question 5. What are your suggestions for the inclusion of students with autism and the development of language and communication using music?</p>	

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