

MUSIC THERAPY AS AN EARLY INTERVENTION IN COMMUNICATION DIFFICULTIES

GLASBENA TERAPIJA KOT ZGODNJA OBRAVNAVA
PRI KOMUNIKACIJSKIH TEŽAVAH

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Abstract: Various groups of people around the world benefit from music therapy treatments, and the area of communication difficulties is no exception. Thus, the purpose of this single case study was to examine the effects of music therapy as an early intervention based on structured and/or improvisational music therapy intervention with a three-year-old nonverbal child. The intervention process used relevant elements of Orff Music Therapy and elements of Nordoff-Robbins Creative Music Therapy. The Individualized Music Therapy Assessment Profile (IMTAP) scale was intended to measure the child's level of functioning in assessed targeted skill sets and to identify effective music therapy strategies. The results provided information about the nonverbal child's ability to respond better to the sound stimulus and develop better sound perception through musical communication. By improving auditory processing skills, the child achieved better outcomes in speech and language development.

Keywords: communication difficulties, expressive communication, IMTAP scale, music therapy in early intervention, receptive communication

Izvleček: Področje glasbene terapije med drugim sega tudi na področje komunikacijskih težav. Cilj pričujoče študije primera je bil tako prepoznati in opisati spremembe, ki so se zgodile pri triletnem neverbalnem otroku med glasbeno terapijo v zgodnji obravnavi, v kateri smo delovali po modelu Orffove glasbene terapije z vključenimi izbranimi elementi Nordoff-Robbinsove kreativne glasbene terapije. Za merjenje sprememb pri otroku smo uporabili tri področja lestvice IMTAP (Individualized Music Therapy Assessment Profile). Analiza podatkov je potrdila, da glasbenoterapevtska komunikacija v obliki petja, igranja na glasbila in raziskovanja zvokov zagotavlja ustvarjalen okvir za otrokove specifične izkušnje. Te se kažejo v izboljšanjem odzivanja na zvočne dražljaje in subtilnejšem zaznavanju zvoka v glasbeni komunikaciji, hkrati pa tudi v povečani sposobnosti slušnega procesiranja in vzdrževanja »tempa« pri razvoju govora ter jezika.

Ključne besede: komunikacijske težave, ekspresivna komunikacija, IMTAP, glasbena terapija v zgodnji obravnavi, receptivna komunikacija

INTRODUCTION

Music has been used extensively throughout history as a healing force to alleviate illness, but it was not until more recently that the specific discipline of music therapy began to develop. Alvin (1975) explained it as the music used in a clear and purposeful manner in the treatment, rehabilitation, education, and training of children and adults with physical, mental, or emotional disorders. Other definitions for the broad field of music therapy include that of Glass (2020), which emphasises the use of music interventions to achieve individual, community, or collaborative goals within a therapeutic but cooperative relationship between a client and a therapist. Numerous disciplines of music therapy practice have emerged from theories of psychoanalysis (Bruscia, 1998; Bunt, 1994; Gross, 2020; Wigram et al., 2002). Jinah (2016, p. 3) defines them as 'a collection of models rooted in and derived from psychoanalysis'. Characteristically, they all seek to achieve a deeper understanding of the inner worlds of individuals and to see how they learn and experience the world around them. From this point of view, Stern's (1985) interaction theory is very important. He revised the psychoanalytic view of development and made a significant contribution to the field of developmental psychology based on empirically grounded research. His most noteworthy contribution is a coherent theory describing how the infant actively builds and develops his sense of self from birth on the basis of experience with actual interactions and events. Of particular interest is how it describes basic preverbal interaction, which contains many of the same elements as music. The correlation of musical elements and elements of communication such as tempo, rhythm, tone, phrasing, manner, pattern, and intensity are necessary for the child in order to decode and organise the sensory experience of interaction and then implement that experience into basic mental sets (Wigram et al., 2002). Stern (2000) cites this compatibility as key to understanding the process that takes place during music therapy. His theory seems to support the view that interaction, communication, and music are fundamentally made up of the same elements. This, therefore, supports the assumption that musical improvisation and music listening can reflect and activate relational patterns and the associated sense of self.

Improvisation and creativity are also of the utmost importance in Orff Music Therapy (hereinafter OMT). These occur as a form of exploring, inventing, and organising musical material in spontaneous play (Bruscia, 1987). The idea of Orff Schulwerk has been varied and applied to the realm of therapy. Gertrud Orff developed Orff Music Therapy OMT and established the theoretical foundations in practical work with children. The emphasis of OMT is therefore on the development of children's social and communicative competencies in order to strengthen their self-concept, not to teach them music (Voigt, 2013). Speech as a rhythmic-sound quality element is treated on the

same basis as in the Orff Schulwerk and is used in two ways: as a rhythmic sequence and/or as a meditative condition – phonetic sound is more important than semantics (Orff, 1980). The therapist can use consonants and vowels, the musical elements of language, to create a fascinating acoustic-linguistic atmosphere that captures the child's attention (Orff 1980, 1989) and elicits a response from the child. The musical setting in a friendly music therapy environment provides the child with the opportunity to communicate in his or her unique way.

Along with OMT, the Nordoff-Robbins model of Creative Music Therapy is one of the best-known improvisational models of music therapy. In their approach, Nordoff and Robbins (1965, 1971, 2007) start from the idea of how every human being responds to music. This idea was particularly important in their work with multiply disabled children, whom they believed had the capacity to respond to music despite their complex difficulties (ibid.). The therapeutic goals are related to the humanistic concept, that is, the pursuit of self-actualisation, the possibility of experiencing peak moments, and the development of specific creative abilities through expression and communication through music. The relationship with the child is based on an emotionally warm, supportive approach that accepts the child as he or she is. An unobtrusive approach is required that acknowledges, reflects, and respects the child's feelings in order to allow the child maximum independence. The therapist's role is to guide the child and facilitate the child's performance of goal-directed activities (Wigram et al., 2002).

In addition to the models of music therapy described above, there is also a whole range of research (Fiveash, 2021; Flor & Hodges, 2006; Hakvoort & Tönjes, 2022; Hodijah & Kurniawati, 2021; Johns, 2018; Kirby et al., 2022; Papousek, 1992; Stern, 2004) that shows that the role of music in the development of a child's self-awareness and ability to share experiences with others is defined as communicative musicality within the psychobiological and developmental psychological theory of interaction. They also demonstrate the brain's responsiveness to music, in which neurologists describe the establishment of a balance between the right and left hemispheres of the brain through various musical activities (Wigram et al., 2002). In early intervention, brain plasticity refers to the brain's ability to adapt and reorganise very easily (Flohr & Hodges, 2006). We link this fact to an early intervention that takes into account the fact that the central nervous system is more flexible during maturation. Thus, children under the age of six benefit from early intervention at this stage and have a better chance of reaching their potential. Environmental factors and social responses have a significant impact on child development (Gutierrez-Jiménez & Franco, 2018; Klein & Gilkerson, 2003). Therefore, the use of musical elements could be of great importance in communicating with non-verbal children who, without the obvious communication tools that most of us use, need to learn other methods to express themselves. Because delayed speech

development is an important indicator of potential later problems in the cognitive and social-emotional domains, and thus of learning disabilities (Gross et al., 2010), it is necessary to begin intervention as early as possible. Here, music therapists must be able to provide supportive communication so that these children can express their feelings and thoughts through music. The role of the music therapist in a team of specialists working in a transdisciplinary manner is necessary and becomes more important. Music therapy can improve the effectiveness of early intervention (Burić, 2020).

METHODS

The purpose of this two-year single case study is to determine the effects of music therapy treatment as an early intervention on a three-year-old boy. The boy was referred for music therapy by his parents because of a speech and language delay and specific communication difficulties, to promote interaction and participation, build relationships, and activate speech and language development. Based on the information gathered by the parents and therapist during the intake process, it was determined that the domains of receptive communication/auditory processing, expressive communication, and musicality should be assessed.

Therefore, the purpose of this study was to measure the child's level of functioning in the assessed targeted skill sets and to observe the trend of the results in order to check the effectiveness of music therapy strategies.

Two research questions were set:

1. What changes were observed in the child's level of functioning in the three areas assessed?
2. What kind of applied music therapy strategies show the best trend of the results within the investigated domains?

The research method underlying the study was the descriptive and causal non-experimental method of scientific research (Creswell & Poth, 2018; Yin, 2017). It was based on the OMT model, using also the principles of Creative Music Therapy developed by Nordoff and Robbins (1977). Both emphasise the importance of providing a musical experience as a nonverbal tool between therapist and child.

DATA GATHERING

The research data consists of those gathered from video records of the sessions and the results of the Individualized Music Therapy Assessment Profile (IM-TAP) scoring forms.

The IMTAP can be used as a treatment plan, as a tool to develop goals and objectives, as a means to address and assess target skill sets, as an indicator of overall functioning to provide a baseline for treatment, as a research method, and as a communication tool for parents and healthcare professionals. The IMTAP, published by Baxter et al. in 2007, was used to evaluate the entire two-year music therapy programme. To help understand the effects of music therapy on a child with speech and communication difficulties, changes on the IMTAP scale were examined in three domains: expressive communication (EC), receptive communication (RC), musicality (MUS). The scoring was based on the analysis of recorded sessions rated by two independent assessors using the IMTAP scale.

VARIABLES ON THE IMTAP SCALE

Variables were operationally defined using the IMTAP scale. Each of the domains consists of several subdomains. In addition to the fundamentals subdomain, there were several other subdomains that were scored. Some of the subdomains were not assessed (N/A) while the fundamentals subdomain must be assessed and cannot be marked as N/A. Consistent assessment of the skills on the fundamentals subdomain allows for continuity in scoring over time and through the whole assessment process.

The domains and subdomains are as follows:

Expressive communication

- a. Fundamentals
- b. Non-vocal communication
- c. Vocalisations
- d. Spontaneous vocalisations
- e. Verbalisations
- f. Relational communication
- g. Vocal idiosyncrasies (N/A)

Receptive communication/auditory perception

- a. Fundamentals
- b. Direction following
- c. Musical changes
- d. Singing/vocalising
- e. Rhythm

Musicality

- a. Fundamentals
- b. Tempo
- c. Rhythm
- d. Dynamics
- e. Vocal
- f. Perfect and relative pitch (N/A)
- g. Creativity and development of musical ideas (N/A)
- h. Music reading (N/A)
- i. Accompaniment (N/A) (Baxter et al., 2007.)

MUSIC THERAPY INTERVENTION

The entire music therapy (hereinafter MT) programme was carried out in 90 sessions. There were 18 sessions in each evaluated period, while music therapy as a systematic process involves three main components, which are assessment, treatment, and evaluation (Bruscia, 1998). Sessions were evaluated at five time-points: checkpoint assessment (CP-A) – assessment at the beginning of the music therapy programme; checkpoint 1 (CP-1) – the first session after 6 months to review the music therapy treatment and observe change trends; checkpoint 2 (CP-2) – after one year of music therapy treatment; checkpoint 3 (CP-3) – after one and a half years of the music therapy treatment; checkpoint evaluation (CP-E) – evaluation at the end of the study programme, after the two-year music therapy programme.

Sessions were held once a week in 30-minute individual sessions. The sessions always took place at the same time and with the same therapist in a safe and friendly environment, always in the same room where there was a piano and a guitar. The other musical instruments that the participant could choose from were kept in a cabinet but were still easily accessible. The room was large enough so that one could move around freely.

After filling out the IMTAP intake form, the first session was scored as a checkpoint assessment (CP-A). The MT treatment was further designed according to the child's needs and therapy goals. The main goal was to improve sound perception and to activate speech and language development. The next phase was an MT treatment based on an improvisational approach to stimulate the child's playfulness, spontaneity, interpersonal skills and sound production, while at the same time giving a flexible structure. There were three checkpoints during this phase. It was necessary to observe if the programme was going well and in a good direction and to observe the changes and the effectiveness of the treatment strategies. The last checkpoint evaluation (CP-E) was scored in the last session after the two-year programme. The data collect-

ed was based on the final score of all the changes achieved in each of the three evaluated domains.

The sessions themselves consisted of three parts: (a) singing and playing the welcome song on the guitar, (b) improvisational part - playing instruments: piano, drums, pentatonic glockenspiel, xylophone, or metallophone, (c) singing the goodbye song on the piano.

Boardmaker software was used to create the following images: Welcome, Playing, and Goodbye. These images guided the course of the music therapy sessions as they served as a form of visual support to facilitate orientation during the sessions. The pictures served to help the child recognise the order of activities. They were hung on the wall in a clearly visible place with Velcro fasteners.

Throughout the MT programme, the music therapy sessions included certain games and play activities that were accompanied by music played by the therapist. The therapist was playing 'here and now' to establish a medium of communication with the child. The welcome song was always sung and played on the guitar. The instrument-playing part focused on improvisation, alternating between the following techniques: imitating, passing, leading, and matching. The therapist helped the child to improvise by stimulating the child's sound production and by presenting a musical theme upon which to base the improvisation by exploring rhythm, melody, tempo, and dynamics (Bruscia, 1996). At the end of each session, the therapist sang and played the goodbye song on the piano.

Before carrying out this research, the music therapist obtained permission and written consent from the parents. In this way, the ethical code was respected. The data relating to the child are only available to the therapist conducting the study.

DATA ANALYSIS

The data obtained in this study were collected and later analysed by scoring the consistency of demonstrating skill on evaluated items in each domain and subdomain as follows: N = never, R = rarely, below 50%, I = inconsistent, 50–79%, C = consistent, 80–100%. In each subdomain, there was a number next to the N, R, I, or C. The sum of these numbers resulted in a raw score. The first step was to calculate the raw score for each subdomain assessed. The next step was to divide the raw score by the total possible score for the subdomains to compute the final score for the subdomain. The total score for the domain was the sum of all subdomain scores divided by the total possible final score for each domain. On the IMTAP scale, the client's results are presented in percentages, based on the responses on the evaluation form. The best possible result would be 100%.

Figure 1

Example of the domain profile graph, Checkpoint assessment (CP-A)

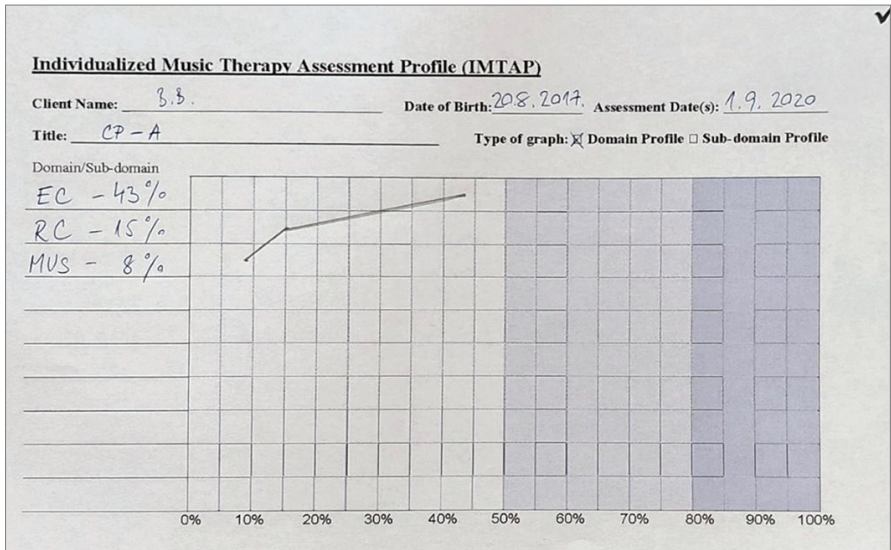


Figure 2

Example of the domain profile graph, Checkpoint evaluation (CP-E)

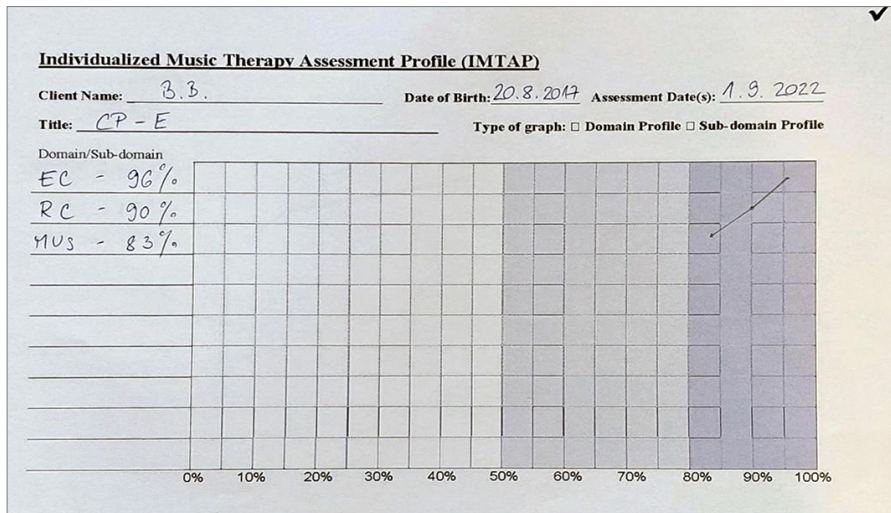


Figure 1 and Figure 2 above show an example of the domain profile IMTAP graph. It provides a clear, visual representation of assessed domains and profiles the client's level of functioning. The graph is shaded for ease of viewing

trends in scoring. The darkest shaded area shows the highest functioning level scores, while the non-shaded area shows the lowest functioning level scores. In addition to the client's name, date of birth, and assessment date, there is also a title for the graph. In the column Domain / Sub-Domain, the therapist can list the domains which were assessed. To the right of each domain, a mark should be placed in the approximate position corresponding to the score for the domain. The average score for each domain is expressed as a percentage.

RESULTS

Changes on the IMTAP in the Investigated Domains during the Music Therapy Programme

After completing the IMTAP intake with parents, the pinpoint assessment domains and the plan for the MT programme were created. The IMTAP domain scoring forms were used to collect data on three domains: expressive communication (EC), receptive communication (RC), and musicality (MUS). Consistent assessment of certain skills allows for continuity in scoring over time and during the assessment period.

Table 1

The average values for the three domains in five checkpoints.

	CP-A	CP-1	CP-2	CP-3	CP-E
EC	43%	44%	48%	73%	96%
RC	15%	28%	60%	75%	90%
MUS	8%	25%	55%	67%	83%

Legend: EC – expressive communication, RC – receptive communication, MUS – musicality, CP-A – assessment at the beginning of the music therapy programme, CP-1 – checkpoint after six months of MT treatment, CP-2 – checkpoint after one year of MT treatment, CP-3 – checkpoint after one and a half years of MT treatment, CP-E – evaluation after two years of MT treatment

The total scoring of expressive communication ranged from 43% to 96%, receptive communication from 15% to 90%, and musicality ranged from 8% to 83%.

According to Table 1, the client's performance on the expressive communication domain in the IMTAP grading system area was C = consistent 80–

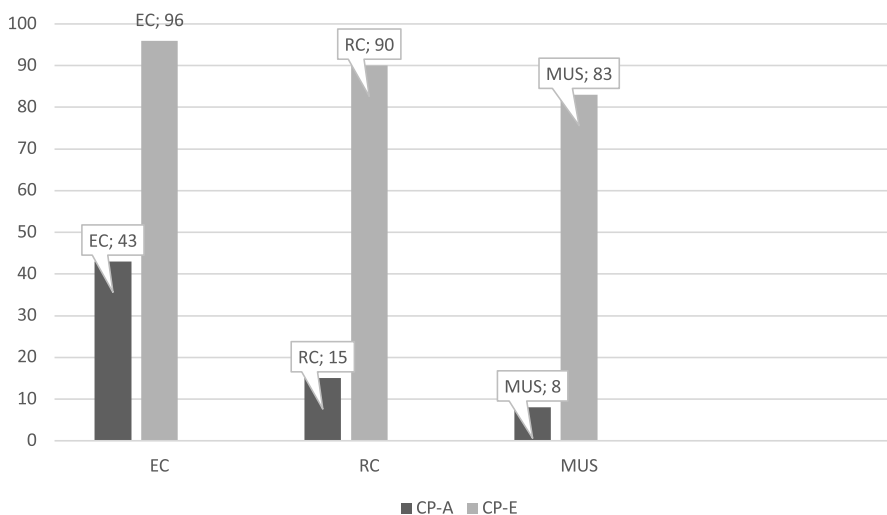
100% only once; it was assessed once as I = inconsistent 50–79%, and three times as R = rarely, below 50%. The range of the lowest and highest answers in total scoring is 53%.

The client's performance on the receptive communication domain in the IMTAP grading system area was C = consistent 80–100% only once; it was assessed two times as I = inconsistent 50–79%, and two times as R = rarely, below 50%. The range of the lowest and highest answers in total scoring is 75%.

The client's performance on the musicality domain in the IMTAP grading system area was C = consistent 80–100% only once; it was assessed two times as I = inconsistent 50–79%, and two times as R = rarely, below 50%. The range of the lowest and highest answers in total scoring is 75%.

Chart 1

Comparison of the assessment at the beginning of the MT programme (CP-A) and the final evaluation after two years (CP-E) of the MT programme



Legend: EC – expressive communication, RC – receptive communication, MUS – musicality, CP-A – assessment at the beginning of the music therapy programme, CP-E – evaluation after two years of MT treatment

Chart 1 shows that the participant had the lowest level of functionality in the musicality (MUS) domain and middle in the receptive communication (RC) domain, while the expressive communication (EC) domain had the highest starting checkpoint (CP-A).

At the end of the two-year MT programme, changes in all three domains are prominent. The greatest change occurred in the receptive communication (RC) domain and a significant change occurred in the musicality (MUS) do-

main. It can also be seen from Chart 1 that the difference between the values on each domain was bigger at the beginning of the MT programme but had reduced by the end of the MT programme.

DISCUSSION

The importance of encouraging pre-language and early language communication is being increasingly recognised. It is important to use a natural setting with the goal of creating preconditions for speech and language development (Ljubešić, 2012) and supporting communication skills. The music therapist, therefore, uses a wide variety of music in therapy sessions to stimulate language and communication development and to observe a child's response to music. The music therapist primarily uses live music, so that variations can be made even within a single song if that will provide the optimum opportunity for the child to make progress on his or her goals (King, 2004). Improvisation is the starting point for music playing in a music therapy setting. The use of vocal sounds as well as playing instruments in a different way allows for greater freedom of expression and exploration (Katušić & Burić, 2021). Our goal was to follow up on the child's level of functioning and to examine the effectiveness of music therapy on a child with communication and speech and language development difficulties.

Using the IMTAP scale, the following changes were tracked for the three domains studied: expressive communication (EC), receptive communication (RC) and musicality (MUS). The values in each domain increased by the end of the MT programme. This means that the child improved significantly during the two-year programme and that the distribution of results at the end of the MT programme was smaller, i.e. the child's values of results became more similar.

A change of 75% occurred in the domains of receptive communication (RC) and musicality (MUS), considering the increase in values from the beginning to the end of the MT programme, while a change of 53% was observed in the domain of expressive communication (EC). This can be explained by the ability of music to activate the need for communication in a pleasing and non-threatening way. It also refers to the internal reactions which have an outward expression in the form of facial expressions, gestures, and vocalisation (Klein & Gilkerson, 2003). Music is not only a kind of language but also a kind of communication that leads to the establishment of relationships. Melodious speech, as well as singing, is one of the prerequisites for language acquisition (Furner & Stelzhammer-Reichardt, 2008). Verbal and nonverbal communication skills and their use during the MT sessions showed a big improvement as they were tested in the expressive communication (EC) domain. The reason for this may lie in the possibility of expressing and communicating through

improvisation; the child did so, and was able to improve his expressive communication. The child in this study showed better results in expressive communication, which includes eye contact, gesture, signs and signals, and facial expression, but he was not able to perceive and apprehend sounds around him for a long period. There was a significant lack of demonstrating an observable response to the sound. This phenomenon of showing better results in the domain of expressive communication compared to the results in the domain of receptive communication can be found in the explanation of the 'music child' (Nordoff & Robbins, 2007; Robbins & Robbins, 1996) and also in the chapter 'Perception' by Orff (1989), as both models have foundations in Stern's psychoanalytic theory.

In the beginning, the boy was a 'condition child', the child with limitation, deformed and incomplete, the child who lacked the inner capacity to communicate his self and state of self. The child's potential for development had not been released. In music therapy, which was the only intervention for the child, it is possible to reach the inherent, inborn musicality. Through musical activities, musical communication, and experience, the inner potential began to grow. Receptive communication developed because of the better response to the sound stimulus and better sound perception through musical communication. It can be assumed that the improvement in receptive communication was in correlation with the development of musicality. The musical-personal nucleus was activated, challenged and encouraged by the therapist and the child began to be open to experiencing himself, others and the whole world around him. It is the music child that answers the questions posed by music, and in doing so communicates the self (Robbins & Robbins, 1996). Perception, bodily movement and emotion as inner agitation are all intimately related (Orff, 1989) and each one affects and activates the other.

As a result of the research in music therapy, the therapist can highlight both benefits and needs for development of the IMTAP assessment tool. The other explanation for showing better results on the expressive communication domain compared to the results on the domain of receptive communication can be found by analysing the IMTAP scale. The results of the IMTAP scoring forms bring out interesting viewpoints concerning the applicability of the assessment tool to receptive communication functioning. A number of IMTAP skills are defined as cross-domain skills which appear in more than one domain. Cross-domain skills were on the domains of receptive communication and musicality. At the beginning of the MT programme, the boy did not use spontaneous vocalisation and was neither able to match the therapist's rhythm nor establish his own internal beat. During the first year of the programme the child failed to demonstrate awareness of changes in intensity, tempo, and dynamics. The first significant change occurred between checkpoint 1 and checkpoint 2 on both the musicality and receptive communication domains. As progress was made in the domain of musicality, the results also increased on the

receptive communication domain. The scale is not sensitive enough to record and differentiate skills significantly on the two aforementioned domains (Sallokivi, 2012). To improve music therapy as a profession, we need more assessment tools with greater sensitivity to ensure more credibility with other professions and service users (Lindahl Jacobsen, 2018).

Nevertheless, according to the obtained results, as the child gained the new possibility of sharing musical experiences, he became more sensitive to sound stimulation, and he was better able to respond to the changes in tempo and dynamics. At the end of the MT programme the child made progress in maintaining 'tempo' and showed joy in singing and improvising. This can be interpreted as meaning that the intervention also influenced the development of musical skills. Although during the music therapy, treatment changes in the musicality domain were not expected, they still happened. The achieved success emerged as personal qualities, such as patience, initiative, and satisfaction of the child, rather than the development of musical skills (Furner et al., 2008; Orff, 1989).

The skills assessed on the expressive communication domain showed better results because the boy was able to articulate his needs in both nonverbal and, later, verbal communication and did not demonstrate any anxiety when involved in direct interaction with the therapist. The plasticity of the human brain and understanding the principles and methods of developmental neurobiology enable early intervention. The impact of the intervention depends on the possibility and the ability of the nervous system to change and adapt as a result of the acquired experiences. A fundamental feature of the entire growth and development of the brain is a continuous reorganisation of the temporary forms of structural and functional organisation, characteristic for certain developmental stages. Certain children's nervous systems change earlier than others, so it is on an individual level whose nervous system will include changes based on experience and how much time it will take to happen. The brain can reorganise itself in response to positive experiences. This kind of positive experience results in concrete changes in the nervous system as well as in behaviour (Nelson, 2003).

The fundamental characteristic of the brain's growth and development is the continuous reorganisation of its temporary structural and functional organisation according to the development stage (Šimić et al., 2022). We assume that there are areas in which a certain amount of time is necessary for the effects of the MT treatment to become visible. The results achieved indicate certain positive shifts which took place slowly but constantly during the MT programme. Keeping all these facts in mind it is possible to explain how, after a two-year programme, the child became more vocally active, more spontaneous, more creative in expression and developed speech acquisition. Improvisation as an original means of expression and communication supports the development of children with communication difficulties (Bang, 2008). Im-

provisation as a form of music therapy offers the possibility of free expression within a firm framework, as the therapist offers a form of unforced dialogue and spontaneous communication.

CONCLUSION

These results support the potential of improvisational music therapy as a part of early intervention for young children with communication difficulties and emphasise the significance of incorporating diverse music therapy techniques to tailor interventions to individual needs. A music therapist uses music as a tool in promoting the creation and establishment of relationships, and for the development of communication, socio-emotional and cognitive skills. Music motivates and encourages young children to create their own expression. Through Orff Music Therapy and elements of Creative Music Therapy, children with speech, language and communication difficulties are given the opportunity to gain experience with musical structures. Making improvisational music as a non-verbal tool, it is possible to help the child develop his or her own self and create his or her own expression. We place special emphasis on the vital sense of individuality and pride in recognised accomplishments that can grow in interaction with appreciative music therapists. The natural responsiveness to music can lead to the acquisition of other skills and knowledge, including speech and language. The positive effects of music have been discussed by many researchers, but there is still a dearth of publications describing music therapy in early intervention. In the context of early intervention, it is necessary to conduct further research with a larger number of young children to investigate the optimal models and techniques of music therapy treatment and its duration, and to develop and establish scales as assessment tools for individual development.

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Povzetek

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Razvoj glasbene terapije posega med drugim tudi na področje komunikacijskih težav, saj se je v zadnjih desetletjih močno razširilo globlje poznavanje in zavedanje nebesednih možnosti sporazumevanja. Cilj pričujoče študije primera je bil prepoznati in opisati spremembe, ki so se zgodile pri triletnem neverbalnem otroku med glasbeno terapijo v zgodnji obravnavni. V dvoletnem procesu te obravnave smo delovali po modelu Orffove glasbene terapije z vključenimi izbranimi relevantnimi elementi Nordoff-Robbinsove kreativne glasbene terapije, ki obe v temeljita na prvinah Sternove psihoanalitične teorije. Za merjenje sprememb pri otroku smo uporabili lestvico IMTAP (Individualized Music Therapy Assessment Profile). Izmed desetih področij lestvice, opredeljenih za vrednotenje s strani terapevta načrtovanih strukturiranih kot tudi improvizacijskih glasbenoterapevtskih intervencij, smo uvedli in raziskali tri: področje receptivno komunikacijsko-slušnega zaznavanja, področje ekspresivne komunikacije in področje muzikalnosti. Ovrednotili smo jih v petih enakomerno razporejenih polletnih časovnih intervalih. Z analizo pridobljenih podatkov smo primerjali pojavnost ter dinamiko sprememb, ki so se zgodile na področju receptivne in ekspresivne komunikacije v korelaciji z otrokovo muzikalnostjo. Izidi so omogočili natančen vpogled v sposobnosti otroka, ki se je v času izvajanja zgodnje obravnave začel intenzivno odzivati skozi glasbeni jezik. Potrdili so, da komunikacija, ki se uporablja v glasbeni terapiji v obliki petja, igranja in raziskovanja zvokov, zagotavlja ustvarjalni okvir za specifične izkušnje, kot so sposobnosti pridobivanja elementov receptivne komunikacije in izboljšanje slušnega procesiranja. Prav tako so razložili, kako je neverbalni otrok poleg receptivnih komunikacijskih sposobnosti napredoval tudi v vzdrževanju tempa pri razvoju govora in jezika ter izražal ve-

selje do petja. Skozi celotno zgodnjo obravnavo neverbalnega otroka se je pri njegovem celostnem razvoju izkazala tudi pomembna vloga terapevta pri zagotavljanju podporne komunikacije in pri izbiri ustreznih kakovostnih terapevtskih strategij.