



RESEARCH ARTICLE

THE ROLE OF MUSIC IN THE DEVELOPMENT AND IMPROVEMENT OF COMMUNICATION AND PSYCHOEMOTIONAL SKILLS OF STUDENTS WITH DISABILITIES

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Abstract

Music constitutes a universal medium of expression and communication capable of transcending linguistic, motor, and cognitive limitations, offering unique opportunities for learning and emotional development to students with disabilities. This article highlights the significance of music in developing communication skills, enhancing self-regulation, and fostering psychoemotional stability. It further examines theoretical approaches, scientific data, and practical examples of applications such as music therapy, the use of rhythmic and multisensory activities, and the inclusion of students with Autism, ADHD (Attention Deficit – Hyperactivity Disorder) and intellectual disability, Down syndrome, motor difficulties, and cerebral palsy. Moreover, international programs of music education interventions that can be adapted to the Greek educational context are presented. Conclusively, the value of music as a tool for participation, social inclusion, and self-expression is emphasized, while underscoring the necessity for systematic teacher training, the creation of individualized scenarios, and evidence-based evaluation of its effectiveness in Special Education and Inclusive Education.

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Introduction:-

Music constitutes a unique tool of communication and expression, capable of transcending traditional linguistic and motor abilities. Through sound, rhythm, and melody, students with disabilities acquire the capacity to express thoughts, emotions, and needs even when verbal expression is limited. Music does not require speech or written language, rendering access to expression smoother and more authentic, while providing a safe environment for interaction.

As Alvin (1978) notes, music functions as a bridge between an individual's inner world and the social environment, facilitating intrapersonal and interpersonal communication. The use of activities such as singing, percussion instruments, and musical movement strengthens students' ability to recognize and express emotions, to communicate non-verbally, and to understand others' reactions. Participation in group musical activities enhances eye contact, gesture-based communication, and the development of emotional skills (Jones, 2020; Freer, 2023).

Communication skills include verbal and non-verbal expression, active listening, empathy, and the ability for social interaction (Bremmer, 2023). At the same time, psychoemotional skills, such as self-awareness, emotional control,

self-esteem, and conflict resolution capacity, are cultivated through participation in musical activities, particularly in students with differentiated needs. According to Gardner's (1983) Multiple Intelligences theory, musical intelligence constitutes an equivalent form of expression, while Vygotsky's (1978) approach supports music as a tool of social learning, strengthening empathy and imitation within the Zone of Proximal Development. The constructivist approach of Piaget (1964), on the other hand, promotes students' active participation, making them protagonists in the learning process. In this sense, it becomes evident that through collective musical experience, students develop skills of cooperation, solidarity, social integration, and inclusion (Laes, 2017; Rykowski & Hebert, 2018; Twyford et al., 2025).

Music as a tool and medium of expression and self regulation of communication and psychoemotional development of students with disabilities:

Music is not limited to communication, as it constitutes a powerful mechanism for developing psychoemotional skills. Students with disabilities have the capacity, through music, to express emotions often left unprocessed within daily school life. Improvisation, participation in songs, musical movement, and the use of percussion instruments serve as tools for releasing emotions such as anger, sadness, or anxiety while simultaneously providing positive reinforcement. Music therapy is internationally recognized as an effective intervention for students with ASD (Autism Spectrum Disorders), ADHD (Attention Deficit – Hyperactivity Disorder), intellectual disability, Down syndrome, motor difficulties, and cerebral palsy (Gao et al., 2025). Activities include structured sessions with defined goals and free improvisation, targeting improvement of concentration, social interaction, emotional regulation, and self-esteem. Participation in musical groups enhances the sense of community and cooperation, as students are taught to wait their turn, synchronize with others, and respect the efforts of their classmates (Patel, 2014; McKenzie et al., 2024).

Various studies demonstrate that music reduces cortisol levels, increases dopamine secretion, and improves psychological well-being, particularly important for students with Autism or ADHD (Attention Deficit – Hyperactivity Disorder). Musical activities provide structure and predictability, reinforcing self-regulation. Through repetitive musical patterns and rhythmic structures, students practice delayed response, inhibition of impulsive behaviors, and development of attention and concentration (Chanda & Levitin, 2013). Music also functions as a multisensory learning medium, as listening, movement, images, and gestures combine to offer multiple ways of receiving information. Through songs with simple movements and illustrated stimuli, students learn to name emotions, recognize fluctuations, and understand basic concepts of social interaction (Caute et al., 2025).

Collective creation requires coordination, attention, and respect for others, strengthening the sense of cooperation, solidarity, and participation. Within musical groups, such as choirs and/or musical-theatrical ensembles, the sense of belonging is strengthened, and alternative modes of communication are provided (Rao et al., 2023). Music offers experiences of soothing and cathartic expression, helping students manage tension and anxiety while simultaneously developing self-regulation strategies and gaining a sense of control and personal achievement (Kertz-Welzel, 2018; Dalgaard et al., 2022). The systematic integration of musical activities into the school program creates a safe, predictable, and multisensory learning environment where students progress both communicatively and psychoemotionally (Zhou et al., 2025).

Social inclusion of students with disabilities through the implementation of innovative musical interventions:

Music is not confined to personal expression and psychoemotional development but constitutes a determining medium for the social inclusion of students with disabilities. Through group activities and collective musical experiences, students develop skills of cooperation, solidarity, and mutual support (Rabeyron et al., 2020). These activities offer an environment where diversity does not constitute an obstacle but a source of creativity and richness, strengthening the sense of social participation.

International music education programs, such as Nordoff-Robbins, Voices Together, and Sounds of Intent, incorporate principles of music therapy and individualized intervention. These programs combine theoretical knowledge with experiential practice, adapting music to each student's needs. Within the school reality, adapting these programs allows teachers to incorporate musical activities in special education and inclusive education classrooms, creating multisensory, flexible, and individualized learning scenarios (Marrades-Caballero et al., 2018; Draper et al., 2019; Milcent & Newman, 2025).

Integrating music into each student's Individualized Education Program (IEP) constitutes a decisive step in supporting social and emotional development. It emerges clearly that through musical activities, students with ASD (Autism Spectrum Disorders), ADHD (Attention Deficit – Hyperactivity Disorder), intellectual disability, and motor difficulties actively participate in group processes, interact with peers, and develop emotional skills in a safe and structured environment (Isoda, 2021). Music facilitates rule-following, turn-taking, and coordination with others, reinforcing social cohesion and cooperation. At the same time, musical activities increase self-esteem and psychological resilience (Bremmer et al., 2021; Whipple & Schwartzberg, 2024). In a program at the Special Primary School of Aigaleo in Athens, Greece, the combined use of music and dramatic art highlighted music as a low-cost yet effective intervention. Significant improvement in the five SDQ subscales indicated that students with disabilities can improve hyperactivity, emotional stability, and social interaction through musical activities (Lappa, 2021).

Creative expression and participation in collective actions enhance feelings of success, personal value, and self-activity (Darrow & Adamek, 2017; Jaschke et al., 2024). The use of multisensory approaches combining sound, image, movement, and verbal stimuli creates a dynamic and attractive learning environment (Hebert & Koji, 2023). Through musical role-playing games, dramatizations with musical background, and creative listening exercises, students learn to cooperate, communicate, and manage their emotions experientially (Salvador et al., 2020; Hatahet et al., 2024). Simultaneously, participation in artistic creations highlights skills often inactive within the traditional educational framework. The design of musical scenarios, adapted to each student's needs, constitutes a critical factor of success (Altun&Eyüpoğlu, 2018).

These scenarios must be flexible, multisensory, and combine music with movement, images, and verbal stimuli. Thus, it becomes evident and comprehensible that through clear objectives for communication, behavior regulation, and social participation, educators can evaluate progress, provide feedback, and strengthen active participation and joy in learning. The music classroom, in this light, transforms into a laboratory of emotional skills, where students develop frustration tolerance, active listening, respect for diversity, and cooperation (Perry, 2022; Zhou et al., 2023). Through the systematic application of musical activities, education becomes experiential, inclusive, and multisensory, offering equal participation to all students, regardless of their abilities (Ong et al., 2024).

Conclusions:-

Music, as a multisensory and universally accessible art, constitutes a powerful tool for enhancing communication, social participation, and psychoemotional development of students with disabilities. Through experiential engagement in musical activities, students learn to express emotions, recognize their needs, and communicate in ways that transcend traditional boundaries. Music strengthens self-regulation, self-esteem, empathy, and cooperation while simultaneously providing a safe environment for expression and social inclusion. International practices and music therapy programs offer models that can be adapted to the Greek educational reality, promoting participation, creativity, and social cohesion. The systematic integration of music into the Individualized Education Program (IEP), the adaptation of multisensory scenarios, and collaboration with music therapists and special educators constitute decisive steps for intervention success.

Music provides students with the opportunity to experience learning as a personal journey, a social activity, and a creative expression. Through musical activities, students with ASD (Autism Spectrum Disorders), ADHD (Attention Deficit – Hyperactivity Disorder), intellectual disability, and motor difficulties acquire communication, self-regulation, and social participation skills often dormant within the traditional educational framework. Participation in collective musical experiences creates conditions of active engagement and cooperation, strengthening students' psychological resilience and self-esteem. Music functions as a multisensory tool of learning and expression, transcending linguistic, motor, or cognitive barriers, offering equal participation to all students regardless of their capacities and abilities.

Overall, music constitutes a unique pedagogical tool capable of supporting the development of communication and psychoemotional skills, promoting equality and participation, and empowering the self-confidence of students with disabilities. Engagement in musical activities advances social inclusion, experiential learning, and active participation, rendering education inclusive, creative, and essentially transformative. In this way, music proves universally valuable for improving quality of life, social inclusion, and psychoemotional development of students with disabilities, offering experiential learning experiences that combine expression, cooperation, and empathy.

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