

**‘Specialization in ICTs and Special Education: Psychopedagogy
of Integration’ Postgraduate Program**
**DEMOCRITUS UNIVERSITY OF THRACE Department of Greek
Philology in collaboration with**
**NCSR DEMOKRITOS Informatics and Telecommunications
Institute**

**MUSIC AND ITS CONTRIBUTION TO THE SUPPORT OF
CHILDREN WITH SPECIAL EDUCATIONAL NEEDS**

LAGOU GEORGIA

POSTGRADUATE
THESIS

Komotini/Athens
2020

ABSTRACT

The purpose of the present study is to explore the use of music in special education and specifically its contribution to the support of children with special educational needs as they are mentioned in international literature. Particular reference is made to music and research in which it was used as a means of supporting student's special educational needs such as in ADHD, Down Syndrome, autism and dyslexia. The study concerns a literature review of both old and contemporary sources regarding the subjects mentioned above. First of all, basic definitions are clarified – e.g. music, music therapy, special educational needs. This is subsequently followed by a historical overview of music, as well as reference to the main representatives of well-known music pedagogical methods and the contribution of music to humans in general. The main part of the study involves research studies about the contribution of music in special education while the final part consists of the conclusions and discussion. The research conducted demonstrated that music contributes significantly to the support of children with special needs. However, further research is deemed necessary in order to reinforce this finding.

Key Words: Music, music therapy, special educational needs, ADHD, Down Syndrome, autism, dyslexia

References

- American Psychiatric Association (2013c). *Highlight of changes from DSM-IV-TR to DSM 5*.
- Aminalsharieh, S., & Hashemiannezhad, F. (2016). A study on effectiveness of music therapy on Verbal intelligence of the students with dyslexia, *International Journal Of Humanities And Cultural Studies, Special Issue, ISSN 2356-5926*.
- Babul, Virji., N., Moiseev, A., Sun, W., Feng,T., Moiseeva, N., Watt, K., J., Huotilainen, M. (2013). Neural collerates of music recognition in Down syndrome, *Brain and Cognition, Elsevier, 8(2)*, 256-262.
- Bowman, W. & Frega, A. L. (2012b). What should the music education profession expect of philosophy? In W. Bowman & A. L. Frega (eds.), *The Oxford Handbook of Philosophy in Music Education* (pp. 17-36). New York: Oxford University Press.
- Buday, E., M. (1995). The Effects of Signed and Spoken Words Taught with Music on Sign and Speech Imitation by Children with Autism, *Journal of Music Therary, XXXII(3)*,189-202.
- Çelik, S (2016). Down Sendromlu Çocukların Eğitiminde Müziğin Önemi Ve Ritim Sazlarının Kullanımı. *sed, 4 (2)*, 213-221.
- Cogo-Moreira H, Andriolo RB, Yazigi L, Ploubidis GB, Brandão de Ávila CR, & Mari JJ. (2012). Music education for improving reading skills in children and adolescents with dyslexia. *Database of Systematic Reviews, 8*.
- Dalcroze, E.J. (1921). *Rhythm, music and education*. New York: G.P. Putnam's Sons.
- Daudt, A. (2002). Children with Down Syndrome and Music: A Parental Description of their Experience in Music.
- Dobrzynska, E., Cesarz H., Rymaszewska, J., Kiejna, A. (2006). Music therapy-history, definitions and applications, *Archives of Psychiatry and Psychotherapy, 8(1)*, 47-52.
DOI: 10.1002/14651858.CD009133.pub2.
- Douglas, S., Willatts, P., (1994), The relationship between musical ability and literacy skills. *Journal of Research in Reading 17(2)*, 99-107.
- Flaugnacco E, Lopez L, Terribili C, Montico M, Zoia S, Schön D (2015). Music Training Increases Phonological Awareness and Reading Skills in Developmental Dyslexia: A Randomized Control Trial. *PLoS ONE 10(9)*: e0138715.
doi:10.1371/journal.pone.0138715.

- Giannopoulou, I., Korkoliakou, P., Pasalari, E., Douzenis, A. (2017). Greek teachers' knowledge about attention deficit hyperactivity disorder. *Psychiatriki*. 28 (3), 226-233.
- Habib, M., Lardy, C., Desiles, T., Commeiras, C., Chobert, J., & Besson, M. (2016). Music and dyslexia: A new musical training method to improve reading and related disorders. *Frontiers in Psychology*, 1-15.
- Hanser, S.B. (1987). *Music Therapist's Handbook*. Misouri, Warren, H. Green, INC.
- Headington C. (2000). *Ιστορία της δυτικής μουσικής: Από την αρχαιότητα ως τις μέρες μας*, Αθήνα: Εκδόσεις Gutenberg.
- Huss, M., Verney, J.P., Fosker, T., Mead, N., Goswami, U. (2010). Music, rhythm, rise time perception and developmental dyslexia: Perception of musical meter predicts reading and phonology. *Elsevier. Cortex* 47 (2011) 674-689.
- IDA (International Dyslexia Association). Διαθέσιμο στο: <https://dyslexiaida.org>
- Ishihara, K., Shimizu, R., Takata, K., Kawashita, E., Amano, K., Shimohata, A., Low, D., Nabe, T., Sago, H., Alexander, W., Ginhoux, F., Yamakawa, K., Akiba, S., (2019). Perturbation of the immune cells and prenatal neurogenesis by the triplication of the Erg gene in mouse models of Down syndrome. *Brain Pathology*, 30, 75-91.
- Jackson, N. A. (2003). A Survey of Music Therapy Methods and Their Role in the Treatment of Early Elementary School Children with ADHD. *Journal of Music Therapy*, XL(4), 302-323.
- Janzen, T.B., & Thaut, M.H. (2018). Rethinking the role of music in the neurodevelopment of autism spectrum disorder. *Music & Science*, 1, 1-18.
- Katsarou, D. (2017). Does music therapy improve linguistic skills of children with dyslexia? A greek study. *International Journal of Current Advanced Research*, 06(10), 7012-7016. DOI: <http://dx.doi.org/10.24327/ijcar.2017.7016.1062>.
- Koliadi-Tiliakou, A. (2009). *Μουσική αυτοαντίληψη, αυτοεκτίμηση και κοινωνική συμπεριφορά παιδιών σχολικής ηλικίας*, 108, Διδακτορική Διατριβή, ΕΚΠΑ.
- Korenberg, J.R., Kawashima, H., Pulst, S-M., Ikeuchi, T., Ogasawara, N., Yamamoto, K., Leepeng, T.P. (2004). The Effects of Background Music on Quality of Sleep in Elementary School Children. *Journal of Music Therapy*, vol.41, issue 2, p.128.
- Lejeune, J., Turpin, R., Gautier, M., M. (1959). Le mongolisme premier exemple d'aberration autosomique humaine, *Annales de Génétique*, Vol. 1, n° 2, pp. 41-49.

- MacFerran, K., (2009). Quenching a Desire for Power: The Role of Music Therapy for Adolescents With ADHD. *Australasian Journal of Special Education*, vol. 33, issue 1, pp. 72–83. DOI 10.1375/ajse.33.1.72.
- MacFerran, K., S., Thompson, G., Bolger, L. (2016). The impact of fostering relationships through music within a special school classroom for students with autism spectrum disorder: an action research study. *Educational Action Research*, 24(2), 241–259. <https://doi.org/10.1080/09650792.2015.1058171>.
- Mather N. & Wendling B. (2012), Essentials of Dyslexia Assessment and Intervention, Wiley and Sons Inc., New Jersey.
- Michels, P. (2001). The role of the musical intelligence in whole brain education. Submitted in partial fulfilment of the requirements for the degree of Doctor Musicae in the Faculty of Humanities, School of Arts, University of Pretoria.
- Montello, L. & Coons, E. (1998). Effects of active versus passive group Music Therapy on preadolescents with emotional , learning and behavioral disorders. *Journal of Music Therapy*, 35 (1), 49-67.
- Ömür, B., D. (2018). Music Therapy in ADHD and Autism. *IOSR Journal Of Humanities And Social Science*, Volume 23, Issue 7, Ver. 9, pp 90-96.
- Overy, K., (2003). Dyslexia and Music, From Timing Deficits to Musical Intervention Ann. N.Y. *New York Academy of Sciences*. 999: 497-505.
- Overy, K., Nicolson, R., I., Fawcett, A.,J., Clarke, E., F. (2003). Dyslexia and Music : Measuring Musical Timing Skills, Published online in Wiley Inter Science (www.interscience.wiley.com). DOI: 10.1002/dys.233.
- Pavlicevic, M., O'Neil, N., Powell, H., Jones, O., & Sampathianaki, E. (2014). Making music, making friends: Long-term music therapy with young adults with severe learning disabilities. *Journal of Intellectual Disabilities*, 18(1), 5-19.
- Pienaar, D. (2012). Music Therapy for Children with Down Syndrome: Perceptions of Caregivers in a Special School Setting, *Kairaranga – Volume 13*, Issue 1: 2012.
- Raglio, A., Traficante, D., Osmano, O. (2011). Autism and music therapy. Intersubjective approach and music therapy assessment. *Nordic Journal of Music Therapy*, 20(2), 123–141.
- Rauscher, F.H., Shaw, G.L., Ky, K.N., (1995). Listening to the Mozart enhances spatial-

temporal reasoning: Towards a neurophysiological basic, *Neuroscience Letters*, 185, 44-47.

Rickson, D., J. (2006). Instructional and Improvisational Models of Music Therapy with Adolescents who have Attention Deficit Hyperactivity Disorder (ADHD): A Comparison of the Effects on Motor Impulsivity. *Journal of Music Therapy*, XLIII (1):39-62. DOI: 10.1093/jmt/43.1.39 · Source: PubMed.

Rickson, D., J., Watkins, W., G. (2003). Music Therapy to Promote Prosocial Behaviors in Aggressive Adolescents Boys- A Pilot Study. *Journal of Music Therapy*, XL(4), 283-301.

Rodgers, A., L. (2012). Music: Sound Medicine for ADHD. In *additude*.
<http://www.additudemag.com/adhd/article/9558.html>.

Rogerio, L. Jorgensen Carrer. (2015). Music and sound in time processing of children with ADHD, *Frontiers in Psychiatry*.

Rugenstein, L. (1996). Wilber's Spectrum Model of Transpersonal Psychology and its application to Music Therapy. *Journal of the American Association of Music Therapy*, 14(1), o.o.9-27.

Schonberg, S.A., West, R., Allen, L., Magenis, E., Ikawa, K., Taniguchi, N., Epstein, C.J. (1990). Molecular Definition of a Region of Chromosome 21 That Causes Features of the Down Syndrome Phenotype. *Elsevier*, 47(2):236-246.

Schumacher, K. (2013). Η σημασία του Orff-Schulwerk στη Μουσική Κοινωνικο-Ενταξιακή Παιδαγωγική και στη Μουσικοθεραπεία, *Approaches: Μουσικοθεραπεία & Ειδική Μουσική Παιδαγωγική*.

Shaboutin, S. (2005). *Oι ιατρικές δυνάμεις της μουσικής*. Αθήνα : Εκδόσεις PLS.

Sharda, M., Tuerk, C., Chowdhury, R., Jamey, K., Foster, N., Custo-Blanch, M., Tan, M., Nadig, A., Hyde, K. (2018). Music improves social communication and auditory-motor connectivity in children with autism, *Translational Psychiatry*, 8:231. DOI 10.1038/s41398-018-0287-3.

Shore, S. (2003). The language of music: Working with children on the autism spectrum, *Journal of Education*, (2) 183.

Soderlund, G., Sikstrom, S., Smart, A. (2007). Listen to the noise: noise is beneficial for cognitive performance in ADHD. *Journal of Child Psychology and Psychiatry* 48:8 pp 840–847. doi:10.1111/j.1469-7610.2007.01749.x.

Sutela K., Juntunen. M., L., & Ojala, J., Inclusive music education: The potential of the Dalcroze approach for students with special educational needs. *Approaches*, SPECIAL ISSUE Dalcroze Eurhythmics in music therapy and special music education, *Approaches: An Interdisciplinary Journal of Music Therapy | Special Issue 8 (2)* 2016.

Sze, S., & Yu, S. (2004). Educational Benefits of Music in an Inclusive Classroom. Retrieved from <https://eric.ed.gov./?id=ED490348>

Toolan, P.G., & Coleman, S.Y.(1995). Music therapy, a description of process: engagement and avoidance in five people with learning disabilities. *Journal of Intellectual Disability Research*, 38(4), 433-444.

Whipple, J., (2012). Music Therapy as an Effective Treatment for Young Children with Autism Spectrum Disorders: A Meta-Analysis. Στο: P.Kern, M.Humpal. *Early Childhood Music Therapy and Autism Spectrum Disorders. Developing Potential in Young Children and Their Families*, 58-76.

Wiebe, J., E. (2007). ADHD, the Classroom and Music: A Case Study. Διαθέσιμο στο: <https://harvest.usask.ca/handle/10388/etd-09162007-165847>.

Yasuhiro, I, Reiko, Y, Mayako, M (2005). Quantifying the Effects of Music Therapy on Mood Using Metabolic Products of Tryptophan – Identifying New Objective Markers, *Journal Music Therapy*, Vol.5. No1, 72-79.

Ανδρούτσος, Π. (2009). Φιλοσοφικές Τάσεις στη Μουσική Παιδαγωγική. Στο Ξ. Παπαπαναγιώτου (επιμ.) *Ζητήματα Μουσικής Παιδαγωγικής* (σελ. 3-35). Θεσσαλονίκη: Εκδόσεις Ε.Ε.Μ.Ε.

Δράκος, Γ. (2003). *Ειδική Παιδαγωγική των Προβλημάτων Λόγου και Ομιλίας, Λογοπαιδεία-Λογοθεραπεία*, Αθήνα: Εκδόσεις Ατραπός.

Δρίτσας, Θ. (2003). *Η μουσική ως φάρμακο: Μια συμπληρωματική θεραπευτική προσέγγιση στη σύγχρονη ιατρική*. Αθήνα: Εκδόσεις S&P Advertising.

Ευδοκίμου-Παπαγεωργίου, Ρ. (1999). *Δραματοθεραπεία-Μουσικοθεραπεία. Η επέμβαση της τέχνης στην ψυχοθεραπεία: θεωρία, ασκήσεις, εφαρμογές*, Αθήνα: Ελληνικά Γράμματα, 24-29.

Κάλφας, Β.,(2013). Πλάτων. *Τίμαιος, τρίτη έκδοση*. Αθήνα: Βιβλιοπωλείον της Εστίας.

Καραμπατζάκη-Δημητρίου Ζ., (2010). *Θέματα Ειδικής Αγωγής και Εκπαίδευσης*. Εκδόσεις Πάραλος.

Καρτασίδου, Λ. (2004). *Μουσική στην Ειδική Παιδαγωγική: Εκπαιδευτικές Θεραπευτικές Προσεγγίσεις της Μουσικής στην Ευρύτερή της Σημασία σε Άτομα με Ειδικές Ανάγκες*. Αθήνα: Τυπωθήτω – Γιώργος Δαρδάνος.

Καρτασίδου, Λ.- Στάμου Λ. (2006). *Μουσική Παιδαγωγική, Μουσική Εκπαίδευση στην Ειδική Αγωγή, Μουσικοθεραπεία, Σύγχρονες Τάσεις και Προοπτικές*, Εκδόσεις Πανεπιστημίου Μακεδονίας.

Μαγαλιού, Μ. (2007) , *Η συμβολή των μουσικών δραστηριοτήτων στη μουσική ανάπτυξη και την κοινωνικοσυναίσθηματική ανάπτυξη παιδιών προσχολικής ηλικίας μέσα από κινητικές και αναπαραστάσεις*, 9, Διδακτορική Διατριβή, Ιόνιο Πανεπιστήμιο.

Μαντζίκος, Κ.,(2015).*Η Μουσική Θεραπεύει*. Θεσσαλονίκη : Εκδόσεις iWrite.gr.

Μπαμπινιώτης, Γ. (2003).*Λεξικό της Νέας Ελληνικής Γλώσσας*, Β' Έκδοση. Αθήνα: Κέντρο Λεξικολογίας ΕΠΕ.

Νέος Θησαυρός Γνώσεων, Γ.Δ.Παπαιωάννου, Εκδόσεις ΔΩΡΙΚΟΣ, Αθήνα.

Νόμος 3699/2008 (ΦΕΚ Α' 199/2.10.2008): Ειδική αγωγή και εκπαίδευση ατόμων με αναπηρία ή με ειδικές εκπαιδευτικές ανάγκες.

O' Donoghue J. (2017). *The Observed Experiences of Music Therapy on Parent-Child Interaction for Families with Children with Down Syndrome*. University of Limerick.
DOI: 10.15845/voices.v17i2.892.

Παπανούτσος, Ε. (1954). *Πλάτων: Πολιτεία*. Τόμος Α': Εκδόσεις: Δαιδαλος
<http://repository.edulll.gr>

Πολιτικά του Αριστοτέλους. Ή', 1339Α-1342Β, Β3-VII,12. <http://www.physics.ntua.gr>.

Πόρποδας, Κ.(1981). *Δυσλεξία. Η Ειδική Διαταραχή Στη Μάθηση Του Γραφτού Λόγου (Ψυχολογική Θεώρηση)*. Έκδοση: Εκπαιδευτήρια «Μορφωτική».

Πρίνου-Πολυχρονιάδου, Λ.(2003). *Μουσική και ψυχολογία. Εισαγωγή στη Μουσικοθεραπεία*. Αθήνα, Εκδόσεις Θυμάρι.

Σακελλαρίου, Χ., (1997). *Η Τέχνη ως θεραπευτικό μέσο*. Στο Μ.Καίλα - Ν.Πολεμικός - Γ. Φιλίππου. *Άτομα με ειδικές ανάγκες*, Β' Τόμος, Ε' έκδοση, Αθήνα: Ελληνικά Γράμματα.

Φραγκούλη, Α., (2012). *Η μουσική ως θεραπευτικό μέσο για παιδιά με ψυχικές διαταραχές στο ειδικό σχολείο*.25-26,28, Διδακτορική Διατριβή, ΕΚΠΑ.

Χατζημιχαήλ, Ε. (2010). *Αναγνωστικές δυσκολίες και Δυσλεξία. Κατασκευή Ψυχομετρικού Εργαλείου Ανίχνευσης Δυσλεξικών Χαρακτηριστικών σε μαθητές Δημοτικού*, 6, Διδακτορική Διατριβή, ΕΚΠΑ.

Ψαλτοπούλου, Θ. (2005). *Η μουσική δημιουργική έκφραση ως θεραπευτικό μέσο σε παιδιά με συναισθηματικές διαταραχές*, 30-31, 47-48, Διδακτορική Διατριβή, ΑΠΘ.

Web:

<https://www.mayoclinic.org/diseases-conditions/down-syndrome/symptoms-causes/syc20355977>

<https://www.musictherapy.org>