

Πρόγραμμα Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τμήματος Ελληνικής Φιλολογίας του Δημοκριτείου Πανεπιστημίου Θράκης
σε συνεργασία με το
ΕΚΕΦΕ Δημόκριτος – Ινστιτούτο Πληροφορικής και Επικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

ΕΠΙΣΤΗΜΟΝΙΚΑ ΟΛΙΣΤΙΚΑ ΜΟΝΤΕΛΑ
ΣΤΗΝ ΠΑΡΕΜΒΑΣΗ
ΣΤΙΣ ΔΙΑΧΥΤΕΣ ΑΝΑΠΤΥΞΙΑΚΕΣ ΔΙΑΤΑΡΑΧΕΣ (ΑΥΤΙΣΜΟΣ)
SCIENTIFIC HOLISTIC MODELS
AS AN INTERVENTION
IN PERVASIVE DEVELOPMENTAL DISORDERS (AUTISM SPECTRUM DISORDER)

της

Μανιακουδάκη Κωνσταντίνας

Μεταπτυχιακή διατριβή που υποβάλλεται
στην τριμελή επιτροπή για την απόκτηση του μεταπτυχιακού τίτλου
του Προγράμματος Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τ.Ε.Φ-Δ.Π.Θ. σε συνεργασία με το Ε.Κ.Ε.Φ.Ε. Δημόκριτος –
Ινστιτούτο Πληροφορικής και Επικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

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ΠΕΡΙΛΗΨΗ

Η Διαταραχή Αυτιστικού Φάσματος (ΔΑΦ) είναι μια νευροαναπτυξιακή διαταραχή που χαρακτηρίζεται από ελλείμματα στην επικοινωνία και την κοινωνική αλληλεπίδραση και περιορισμένα, επαναλαμβανόμενα μοτίβα σε συμπεριφορές, ενδιαφέροντα και δραστηριότητες. Τα συμπτώματα εμφανίζονται νωρίς στην ανάπτυξη και επηρεάζουν την καθημερινή λειτουργία των ατόμων με αυτισμό. Ο όρος «φάσμα» χρησιμοποιείται λόγω της ετερογένειας στην παρουσίαση και τη σοβαρότητα των συμπτωμάτων του αυτισμού, καθώς και στις δεξιότητες και το επίπεδο λειτουργικότητας των ατόμων με τη διαταραχή αυτή. Μεγάλο πλήθος επιστημονικών ολιστικών παρεμβάσεων έχουν εφαρμοστεί, ώστε να περιορίσουν τα βασικά αυτά συμπτώματα του αυτισμού. Η παρούσα έρευνα είναι μία βιβλιογραφική ανασκόπηση η οποία εστιάζει στις επιστημονικές ολιστικές παρεμβάσεις που έχουν εφαρμοστεί στα άτομα με αυτισμό, εστιάζοντας στα γενικά εκπαιδευτικά προγράμματα, στις αισθητηριακές παρεμβάσεις, στις συμπληρωματικές και εναλλακτικές θεραπείες και τέλος, στη χρήση των Τεχνολογιών Πληροφορικής και Επικοινωνιών (Τ.Π.Ε.) και της Ρομποτικής. Τα αποτελέσματα έδειξαν ότι η εφαρμογή των κατάλληλων ολιστικών παρεμβάσεων μπορεί να βελτιώσει αποτελεσματικά την εμφάνιση βασικών συμπτωμάτων του αυτισμού, όπως την κοινωνική αλληλεπίδραση, τα γλωσσικά ελλείμματα, τη βλεμματική επαφή, τα συμπεριφορικά προβλήματα, τις κοινωνικές δεξιότητες, τη βελτίωση της αίσθησης του εαυτού και την καλύτερη κατανόηση των συναισθημάτων στα άτομα που εφαρμόζεται. Επομένως, καταλήγουμε στο συμπέρασμα ότι τα επιστημονικά ολιστικά μοντέλα μπορούν να είναι μια αποτελεσματική μέθοδος παρέμβασης στις Διάχυτες Αναπτυξιακές Διαταραχές (αυτισμός).

ΛΕΞΕΙΣ ΚΛΕΙΔΙΑ: Διάχυτες Αναπτυξιακές Διαταραχές, αυτισμός, ολιστική παρέμβαση, DSM- 5, ανικανότητες, κοινωνικά ελλείμματα, νευροαναπτυξιακές διαταραχές

10 Βιβλιογραφία

Ξενόγλωσση Βιβλιογραφία

Abell, F., Happé, F., & Frith, U. (2000). Do triangles play tricks? Attribution of mental states to animated shapes in normal and abnormal development. *Cognitive Development*, 15(1), 1–16. [https://doi.org/10.1016/S0885-2014\(00\)00014-9](https://doi.org/10.1016/S0885-2014(00)00014-9)

Abidin RR. (1990). *Parenting stress index/short form*. Lutz, FL: Psychological Assessment Resources.

Abidin, R. R. (1995). *Parenting Stress Index (3rd ed.)*. Odessa, FL: Psychological Assessment Resources.

Alexandropoulou, V., Anagnostopoulou, P., Drigas, A., Loretzou, G., Lykothanasi, A., & Ntaountaki, P. (2019). Robotics in Autism Intervention. *International Journal of Recent Contributions from Engineering, Science & IT (IJES)*, 7(4), 4-17. <https://doi.org/10.3991/ijes.v7i4.11448>

Alves, S., Marques, A., Queirós, C., & Orvalho, V. (2013). LIFEisGAME prototype: A serious game about emotions for children with autism spectrum disorders. *PsychNology Journal*, 11(3), 191–211.

Al-Wakeel, L., Al-Ghanim, A., Al-Zeer, S., & Al-Nafjan, K. (2015). A Usability Evaluation of Arabic Mobile Applications Designed for Children with Special Needs-Autism. *Lecture Notes on Software Engineering*, 3(3), 203-209. <https://doi.org/10.7763/LNSE.2015.V3.191>

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th, text revision ed.). Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th, text revision ed.). Washington, DC: American Psychiatric Association.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261–271. <https://doi.org/10.1037/0022-0663.84.3.261>

- Anand, B., Navathe, B.B., Velusamy, S., Kannan, H., Sharma, A., & Gopalakrishnan, V. (2012). *Beyond touch: Natural interactions using facial expressions*. In IEEE Consumer Communications and Networking Conference (pp. 255 – 259). Bangalore, India. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.384.3274&rep=rep1&type=pdf>
- Austin, J. H. (1998). *Zen and the brain: Toward an understanding of meditation and consciousness*. The MIT Press, Cambridge, Mass, USA. Retrieved from <https://archive.org/details/zenbraintowardun0000aust>
- Auticiel (2014). *Autimo* (Version 3.3.7) [Mobile application software]. Retrieved from: <https://itunes.apple.com/us/app/autimo-amikeo-apps/id495565736?mt=8>
- Ayres A.J. (1972). *Sensory Integration and Learning Disorders*. Los Angeles, CA: Western Psychological Services.
- Bakola, L. N., & Drigas, A. (2020). Technological Development Process of Emotional Intelligence as a Therapeutic Recovery Implement in Children with ADHD and ASD Comorbidity. *International Journal of Online and Biomedical Engineering (iJOE)*, 16(3), 75-85. <https://doi.org/10.3991/ijoe.v16i03.12877>
- Bar-On, R. (2001). *Emotional intelligence and self-actualization*. In J. Ciarrochi, J. P. Forgas, & J. D. Mayer (Eds.), *Emotional intelligence in everyday life: A scientific inquiry* (p. 82–97). Psychology Press.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “Reading the Mind in the Eyes” test revised version: A study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(2), 241–251. Retrieved from https://depts.washington.edu/uwcscs/sites/default/files/hw00/d40/uwcscs/sites/default/files/Mind%20in%20the%20Eyes%20Scale_0.pdf

Bateson, G. (1979). *Mind and Nature: A Necessary Unity*. Dutton: New York, NY, USA.

Bellani, M., Fornasari, L., Chittaro, L., & Brambilla, P. (2011). Virtual reality in autism: state of the art. *Epidemiology and Psychiatric Sciences*, 20(3), 235-238. <https://doi.org/10.1017/S2045796011000448>

Bernard-Opitz, V., Sriram, N., & Nakhoda-Sapuan, S. (2001). Enhancing social problem solving in children with autism and normal children through computer-assisted instruction. *Journal of Autism and Developmental Disorders*, 31(4), 377–384. <https://doi.org/10.1023/a:1010660502130>

Biela, A. (2014). Paradigm of Unity as a Prospect for Research and Treatment in Psychology. *Journal for Perspectives of Economic Political and Social Integration*, 19(1-2), 207-227. <https://doi.org/10.2478/v10241-012-0018-2>

Bondy, A. S., & Frost, L. A. (1994). The Picture Exchange Communication System. *Focus on Autism and Other Developmental Disabilities*, 9(3), 1–19. <https://doi.org/10.1177/108835769400900301>

Boyatzis, R.E. (2009), Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development*, 28(9), 749-770. <https://doi.org/10.1108/02621710910987647>

Brickenkamp, R., & Zillmer, E. (1998). *The d2 test of attention*. Seattle: Hogrefe & Huber. Retrieved from <https://pdf.wecabrio.com/d2-test-attention.pdf>

Briñol, P., Petty, R. E., & Rucker, D. D. (2006). The role of meta-cognitive processes in emotional intelligence. *Psicothema*, 18 Suppl, 26–33. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/17295954/>

Brown, R. P., & Gerbarg, P. L. (2009). Yoga Breathing, Meditation, and Longevity. *Annals of the New York Academy of Sciences*, 1172(1), 54–62. <https://doi.org/10.1111/j.1749-6632.2009.04394.x>

- Bzoch, K. R., & League, R. (1989). *Receptive-Expressive Emergent Language Scales*. Gainesville, FL: Computer Management Resources.
- Cahn, B. R., Delorme, A., & Polich, J. (2009). Occipital gamma activation during Vipassana meditation. *Cognitive Processing*, 11(1), 39–56. <https://doi.org/10.1007/s10339-009-0352-1>
- Canitano, R. (2006). Epilepsy in autism spectrum disorders. *European Child & Adolescent Psychiatry*, 16(1), 61–66. <https://doi.org/10.1007/s00787-006-0563-2>
- Cannell, J. J., & Grant, W. B. (2013). What is the role of vitamin D in autism? *Dermato-Endocrinology*, 5(1), 199–204. <https://doi.org/10.4161/derm.24356>
- Case-Smith, J., & Arbesman, M. (2008). Evidence-based review of interventions for autism used in or of relevance to occupational therapy. *American Journal of Occupational Therapy* 62, 416–429. <https://doi.org/10.5014/ajot.62.4.416>
- Chaidi, I., & Drigas, A. (2020). Autism, Expression, and Understanding of Emotions: Literature Review. *International Journal of Online Engineering (iJOE)*, 16(2), 94-111. <https://doi.org/10.3991/ijoe.v16i02.11991>
- Chan, A. S., Sze, S. L., & Han, Y. M. Y. (2014). An intranasal herbal medicine improves executive functions and activates the underlying neural network in children with autism. *Research in Autism Spectrum Disorders*, 8(6), 681–691. <https://doi.org/10.1016/j.rasd.2014.03.007>
- Chapman, C. D., Frey, W. H., Craft, S., Danielyan, L., Hallschmid, M., Schiöth, H. B., & Benedict, C. (2012). Intranasal Treatment of Central Nervous System Dysfunction in Humans. *Pharmaceutical Research*, 30(10), 2475–2484. <https://doi.org/10.1007/s11095-012-0915-1>

- Charitaki, G. (2015). The Effect of ICT on Emotional Education and Development of Young Children with Autism Spectrum Disorder. *Procedia Computer Science*, 65, 285–293. <https://doi.org/10.1016/j.procs.2015.09.081>
- Charlop – Christy, M. H., Caprenter, M., Leblanc, L. & Kellet, K., (2002). Using the picture exchange communication system (PECS) with children with autism: assessment of PECS acquisition, speech, social–communicative behavior, and problem behavior. *Journal of Applied Behavior Analysis*, 35, 213–231. <https://doi.org/10.1901%2Fjaba.2002.35-213>
- Chauhan, A., Audhya, T., & Chauhan, V. (2012). Brain Region-Specific Glutathione Redox Imbalance in Autism. *Neurochemical Research*, 37(8), 1681–1689. <https://doi.org/10.1007/s11064-012-0775-4>
- Cho, S. J., & Ahn, D. H. (2016). Socially assistive robotics in autism spectrum disorder. *Hanyang Medical Reviews*, 36(1), 17-26. <https://doi.org/10.7599/hmr.2016.36.1.17>
- Conners, C. K. (1997). *Conners' Rating Scales-Revised: Technical manual*. New York: Multi-Health Systems.
- Coren, S. (2003). *Sensation and Perception*. John Wiley & Sons, Inc.: Hoboken, NJ, USA.
- Cox, M.T. (2005). Metacognition in computation: A selected research review. *Artificial Intelligence*, 169(2), 104–141. <https://doi.org/10.1016/j.artint.2005.10.009>
- Crisp, R. J., & Turner, R. N. (2014). *Essential Social Psychology: 3rd Edition*. SAGE Publications Ltd. <http://www.uk.sagepub.com/books/Book240655>

- Dane, S., & Balci, N. (2007). Handedness, eyedness and nasal cycle in children with autism. *International Journal of Developmental Neuroscience*, 25(4), 223–226.
<https://doi.org/10.1016/j.ijdevneu.2007.03.005>
- Dawson, G., & Watling, R. (2000). Interventions to Facilitate Auditory, Visual, and Motor Integration in Autism: A Review of the Evidence. *Journal of Autism and Developmental Disorders*, 30(5), 415–421. <https://doi.org/10.1023/a:1005547422749>
- Dawson, G., & Watling, R. (2000). Interventions to Facilitate Auditory, Visual, and Motor Integration in Autism: A Review of the Evidence. *Journal of Autism and Developmental*, 30(5), 415–421.
<https://doi.org/10.1023/A:1005547422749>
- Delis, D. C., Kaplan, E., & Kramer, J. H. (1997). *Delis-Kaplan Executive Function Scale: Standardization edition manual*. New York: The Psychological Corporation.
- Dell, M. L. (2006). Handbook of Autism and Pervasive Developmental Disorders: Diagnosis, Development, Neurobiology, and Behavior, 3rd Edition, Volumes 1 and 2. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(6), 759–761.
<https://doi.org/10.1097/01.chi.0000228313.45159.0a>
- DeMatteo, F. J., Arter, P, Sworen-Parise, C, Fasciana, M. & Paulhamus, M. (2012). Social skills training for young adults with autism spectrum disorder: Overview and implications for practice. *National Teacher Education Journal*, 5, 57–66. Retrieved from
<https://pdfs.semanticscholar.org/1e8a/b140e86f55ef0c2a9c7034f04004b8a2f7ee.pdf>
- Devecchi, C., Mintz, J., & March, C. (2009, July). *Supporting user participation in developing mobile technology to help young people with autism: the HANDS smartphone project*. International Conference on Information Communication Technologies in Education (ICICTE 2009). Corfu, Greece. <http://nectar.northampton.ac.uk/id/eprint/11327>

- Drigas, A., & Papoutsis, C. (2018). A New Layered Model on Emotional Intelligence, *Behavioral Sciences*, 8(5), 45. <https://doi.org/10.3390/bs8050045>
- Drigas, A., & Papoutsis, C. (2018). Mobile Applications to Improve Emotional Intelligence in Autism – A Review. *International Journal of Interactive Mobile Technologies (IJIM)* 12(6), <https://doi.org/47.10.3991/ijim.v12i6.9073>
- Drigas, A., & Vlachou, J. (2016). Information and Communication Technologies (ICTs) and Autistic Spectrum Disorders (ASD). *International Journal of Recent Contributions from Engineering, Science & IT (IJES)*, 4(1), <http://doi.org/10.3991/ijes.v4i1.5352>
- Drigas, A., Bakola, L., & Rizos, N. (2019). ICTs for emotional and social skills development for children with ADHD and ASD Co-existence. *International Journal of Recent Contributions from Engineering, Science & IT (IJES)*, 14(5). <https://doi.org/10.3991/ijet.v14i05.9430>
- Drigas, A., Bakola, L., & Rizos, N. (2019). ICTs for emotional and social skills development for children with ADHD and ASD Co-existence. *International Journal of Recent Contributions from Engineering, Science & IT (IJES)*, 14(5). <https://doi.org/10.3991/ijet.v14i05.9430>
- Drigas, A., Karabatzaki, Z., Loukeris, D., & Stathopoulou, A. (2020). Evaluation of Mobile Apps Effectiveness in Children with Autism Social Training via Digital Social Stories. *International Journal of Interactive Mobile Technologies (IJIM)* 14(3), 4-17. <https://doi.org/10.3991/ijim.v14i03.10281>
- Effros, R. B. (2011). Telomere/telomerase dynamics within the human immune system: Effect of chronic infection and stress. *Experimental Gerontology*, 46(2-3), 135–140. <https://doi.org/10.1016/j.exger.2010.08.027>

- Elfenbein, H. A., & Ambady, N. (2002). On the universality and cultural specificity of emotion recognition: a meta-analysis. *Psychological bulletin*, 128(2), 203–235. <https://doi.org/10.1037/0033-2909.128.2.203>
- Elfenbein, H. A., & Ambady, N. (2002). Predicting workplace outcomes from the ability to eavesdrop on feelings. *The Journal of applied psychology*, 87(5), 963–971. <https://doi.org/10.1037/0021-9010.87.5.963>
- ElGarhy, S., & Liu, T. (2016). Effects of psychomotor intervention program on students with autism spectrum disorder. *School Psychology Quarterly*, 31(4), 491–506. <https://doi.org/10.1037/spq0000164>
- Everyday Speech. (2014). *Let's Learn Emotions: Emotion Recognition* (Version 1.2.1) [Mobile application software]. Retrieved from: <https://itunes.apple.com/us/app/lets-learn-emotions-pro-emotion-recognition-for-speech/id908762349?mt=8>
- Fazlıoğlu, Y., & Baran, G. (2008). A Sensory Integration Therapy Program on Sensory Problems for Children with Autism. *Perceptual and Motor Skills*, 106(2), 415–422. <https://doi.org/10.2466/pms.106.2.415-422>
- Fernandes, T., Alves, S., Miranda, J., Queirós, C., & Orvalho, V. (2011, October). *LIFEisGAME: A facial character animation system to help recognize facial expressions*. In International Conference on ENTERprise Information Systems, (pp. 423-432). Springer, Berlin, Heidelberg.
- Fernández-Berrocal, P., & Extremera, N. (2006). Emotional intelligence: a theoretical and empirical review of its first 15 years of history. *Psicothema*, 18 Suppl, 7–12. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/17295952/>

- Fish, B. (1985). Children's psychiatric rating scale. *Psychopharmacology Bulletin*, 2, 753–770. Retrieved from https://www.researchgate.net/publication/291842571_Children's_Psychiatric_Rating_Scale_scoring
- Flippin, M., Reszka, S., & Watson, L. R. (2010). Effectiveness of the Picture Exchange Communication System (PECS) on language and speech of children with autism: A metanalysis. *American Journal of Speech-Language Pathology*, 19, 178-195. [https://doi.org/10.1044/1058-0360\(2010/09-0022\)](https://doi.org/10.1044/1058-0360(2010/09-0022))
- Foxx, R. M. (2008). Applied Behavior Analysis Treatment of Autism: The State of the Art. *Child and Adolescent Psychiatric Clinics of North America*, 17(4), 821–834. <https://doi.org/10.1016/j.chc.2008.06.007>
- Fridin, M., & Yaakobi, Y. (2011). Educational Robot for Children with ADHD/ADD, Architecture Design. Retrieved from <https://www.semanticscholar.org/paper/Educational-Robot-for-Children-with-ADHD-%2F-ADD-%2C-Fridin-Yaakobi/70978e3c5dec9ccb1a02856bd12ac38844300119>
- Frith, U., & Happé, F. (2005). Autism spectrum disorder. *Current Biology*, 15(19), 786–790. <https://doi.org/10.1016/j.cub.2005.09.033>
- Gay, V., Leijdekkers, P., Agcanas, J., Wong, F., & Wu, Q. (2013, January). *CaptureMyEmotion: Helping Autistic Children Understand their Emotions Using Facial Expression Recognition and Mobile Technologies*. In Bled eConference (p. 10). Retrieved from https://www.researchgate.net/publication/258850019_CaptureMyEmotion_Helping_Autistic_Children_Understand_their_Emotions_Using_Facial_Expression_Recognition_and_Mobile_Technologies

- Ghasemtabar, S. N., Hosseini, M., Fayyaz, I., Arab, S., Naghashian, H., & Poudineh, Z. (2015). Music therapy: An effective approach in improving social skills of children with autism. *Advanced biomedical research*, 4, 157. <https://doi.org/10.4103/2277-9175.161584>
- Gillberg, C, Ehlers, S., Schaumann, H., Jakobsson, G., Dahlgren, S. V, Lindblom, R., Bagenholm, A., Tjuus, T. & Blidner, E. (1990). Autism under age 3 years: A clinical study of 28 cases referred for autistic symptoms in infancy. *Journal of Child Psychology and Psychiatry*, 31, 921-934. <https://doi.org/10.1111/j.1469-7610.1990.tb00834.x>
- Gilliam, J. E. (2001). *Gilliam Asperger's Disorder Scale*. Austin, Texas: Pro-Ed Inc.
- Gioia, G. A., Isquith, K., Guy, S. C., & Kenworthy, L. (2000). *Behavior Rating Inventory of Executive Function (BRIEF)*. Australia: ACER.
- Golan, O., & Baron-Cohen, S. (2006). Systemizing empathy: Teaching adults with Asperger syndrome or high-functioning autism to recognize complex emotions using interactive multimedia. *Development and Psychopathology*, 18(2), 591-617. <http://doi.org/10.1017/s0954579406060305>
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books.
- Goleman, D. (1996). *Emotional Intelligence: Why it Can Matter More Than IQ*. Bloomsbury Publishing: London, UK.
- Goleman, D. (1998a) *Working with Emotional Intelligence*. New York, Bantam Books.
- Grandin, T. (1998) Objective scoring of animal handling and stunning practices at slaughter plants. *Journal American Veterinary Medical Association*, 212, 36-39. Retrieved from <https://europepmc.org/article/med/9426775>

Gray, C. (2000). *Writing social stories with Carol Gray: Accompanying workbook to video*. Arlington, TX: Future Horizons, Incorporated.

Gray, C. (2002). Friendship on the horizon: Can Social Stories pave the road? Includes Watch, listen, move closer, ease in, a 10 page rip out insert. *Jenison Autism Journal*, 14(3), 10-16. Retrieved from <https://carolgraysocialstories.com/wp-content/uploads/2015/10/Fall-2002-ISSUE-with-appendix.pdf>

Gray, C. (2010). *The new Social Story™ book*. Arlington, TX: Future Horizons.

Greenspan, S. I. (1992). *Infancy and early childhood: The practice of clinical assessment and intervention with emotional and developmental challenges*. Madison, CT: International Universities Press.

Greenspan, S.I., & Wieder, S. (1997). Developmental patterns and outcomes in infants and children with disorders in relating and communicating: A chart review of 200 cases of children with autistic spectrum diagnoses. *Journal of Developmental and Learning Disorders* 1(1), 87–141. Retrieved from <http://www.researchautism.net/publications/3515/>

Grzadzinski, R., Huerta, M. & Lord, C. (2013). DSM-5 and autism spectrum disorders (ASDs): an opportunity for identifying ASD subtypes. *Molecular Autism* 4, 12. <https://doi.org/10.1186/2040-2392-4-12>

Guastella, A. J., Einfeld, S. L., Gray, K. M., Rinehart, N. J., Tonge, B. J., Lambert, T. J., & Hickie, I. B. (2010). Intranasal Oxytocin Improves Emotion Recognition for Youth with Autism Spectrum Disorders. *Biological Psychiatry*, 67(7), 692–694. <https://doi.org/10.1016/j.biopsych.2009.09.020>

Gutiérrez-Cobo, M. J., Cabello, R., & Fernández-Berrocal, P. (2016). The Relationship between Emotional Intelligence and Cool and Hot Cognitive Processes: A Systematic Review. *Frontiers in behavioral neuroscience*, 10, 101. <https://doi.org/10.3389/fnbeh.2016.00101>

- Hagberg, B., Aicardi, J., Dias, K., & Ramos, O. (1983). A progressive syndrome of autism, dementia, ataxia, and loss of purposeful hand use in girls: Rett's syndrome: Report of 35 cases. *Annals of Neurology*, 14, 471-479. <https://doi.org/10.1002/ana.410140412>
- Halle, S., Ninness, C., Ninness, S. K., & Lawson, D. (2016). Teaching social skills to students with autism: A video modeling social stories approach. *Behavior and Social Issues*, 25, 42-54. <https://doi.org/10.5210/bsi.v25i0.6190>
- Hansen, O.B., Abdurhim, A., & McCallum S. (2013) Emotion Recognition for Mobile Devices with a Potential Use in Serious Games for Autism Spectrum Disorder. In: Ma M., Oliveira M.F., Petersen S., Hauge J.B. (eds) *Serious Games Development and Applications*. SGDA 2013. Lecture Notes in Computer Science, vol 8101. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-40790-1_1
- Hartley, S. L., Sikora, D. M., & McCoy, R. (2008). Prevalence and risk factors of maladaptive behavior in young children with autistic disorder. *Journal of Intellectual Disability Research*, 52(10), 819–829. <https://doi.org/10.1111/j.1365-2788.2008.01065.x>
- Hassan, A., Shafi, M., & Khattak, M. I. (2016). Multi-touch collaborative gesture recognition-based user interfaces as behavioral interventions for children with autistic spectrum disorder: A review. *Mehran University Research Journal of Engineering & Technology*, 35(4), 543. <https://doi.org/10.22581/muet1982.1604.06>
- Hermelin, B. A., & O'Connor, N., (1970). *Psychological experiments with autistic children*. Oxford: Pergamon Press.
- Holick, M. F. (2007). Vitamin D Deficiency. *New England Journal of Medicine*, 357(3), 266–281. <https://doi.org/10.1056/nejmra070553>

- Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research: Neuroimaging*, 191(1), 36-43. <https://doi.org/10.1016/j.pscychresns.2010.08.006>
- Hossain, M. S., & Muhammad, G. (2017). An emotion recognition system for mobile applications. *IEEE Access*, 5, 2281-2287. <https://doi.org/10.1109/ACCESS.2017.2672829>
- Houghton, K., Schuchard, J., Lewis, C., & Thompson, C. K. (2013). Promoting child-initiated social-communication in children with autism: Son-Rise Program intervention effects. *Journal of Communication Disorders*, 46(5-6), 495–506. <https://doi.org/10.1016/j.jcomdis.2013.09.004>
- Howlin, P. & Moore, A. (1997). Diagnosis in autism: A survey of over 1200 patients in the UK. *Autism*, 1(2), 135–162. <https://doi.org/10.1177/1362361397012003>
- Howlin, P. (2011). Early Start Denver Model for Young Children with Autism: Promoting Language, Learning, and Engagement. *Child and Adolescent Mental Health*, 16(2), 128–128. <https://doi.org/10.1111/j.1475-3588.2011.00603.2.x>
- Hurt-Thaut, C. (2012). *Clinical practice in music therapy*. Oxford Handbooks Online. <https://doi.org/10.1093/oxfordhb/9780199298457.013.0047>
- I Can Do Apps, LLC. (2013). *Emotions 2 from I Can Do Apps* (Version 1.3) [Mobile application software]. Retrieved from: <https://itunes.apple.com/ca/app/emotions-2-from-ican-doapps/id661208169?mt=8>
- Innovative Mobile Apps Ltd © Alligator Apps. *Touch and Learn – Emotions* (Version 3.0) [Mobile application software]. Retrieved from: <https://itunes.apple.com/us/app/touch-andlearn-emotions/id451685022?mt=8>

Institut Teknologi Brunei. (2013). EducateMe. [Mobile app]. [Accessed May, 2020]. Available from: Apple AppStore.

Ioannidou, F., & Konstantikaki, V. (2008). Empathy and emotional intelligence: What is really about? *International Journal of Caring Sciences*, 1(3), 118-123. Retrieved from <https://doaj.org/article/43bd8bcb3a8a4ea198bdf302faf031b9>

Jacobs, T. L., Epel, E. S., Lin, J., Blackburn, E. H., Wolkowitz, O. M., Bridwell, D. A., ... Saron, C. D. (2011). Intensive meditation training, immune cell telomerase activity, and psychological mediators. *Psychoneuroendocrinology*, 36(5), 664–681. <https://doi.org/10.1016/j.psyneuen.2010.09.010>

Johnson, D., Deterding, S., Kuhn, K. A., Staneva, A., Stoyanov, S., & Hides, L. (2016). Gamification for health and wellbeing: A systematic review of the literature. *Internet Interventions*, 6, 89-106. <https://doi.org/10.1016/j.invent.2016.10.002>

Jordan, C. J. (2010). Evolution of autism support and understanding via the World Wide Web. *Intellectual and developmental disabilities*, 48(3), 220-227. <https://doi.org/10.1352/1934-9556-48.3.220>

Josipovic, Z. (2010). Duality and nonduality in meditation research. *Consciousness and Cognition*, 19(4), 1119–1121. <https://doi.org/10.1016/j.concog.2010.03.016>

Jyonouchi, H., Sun, S., & Itokazu N. (2002). Innate immunity associated with inflammatory responses and cytokine production against common dietary proteins in patients with autism spectrum disorder. *Neuropsychobiology*, 46(2), 76–84. <https://doi.org/10.1159/000065416>

Kandalaf, M. R., Didehbani, N., Krawczyk, D. C., Allen, T. T., & Chapman, S. B. (2012). Virtual Reality Social Cognition Training for Young Adults with High-Functioning Autism. *Journal of Autism and Developmental Disorders*, 43(1), 34–44. <https://doi.org/10.1007/s10803-012-1544-6>

Kanner, K. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2, 217-250.

Karal, M. A., Wolfe, P. S. (2018). Social Story Effectiveness on Social Interaction for Students with Autism: A Review of the Literature. *Education and Training in Autism and Developmental Disabilities*, 53(1), 44-58.

Kasari, C., & Rotheram-Fuller, E. (2007). Peer Relationships of children with autism: Challenges and interventions. In E. Hollander & E. Anagnostou (Eds.), *Clinical manual for the treatment of autism* (pp. 235–257). American Psychiatric Publishing.

Katcher, A.H. (2002). Animals in therapeutic education: Guides into the liminal state. In: P.H. Kahn, Jr., & S.R. Kellert (Eds.), *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations* (pp.179–198). Cambridge, MA: MIT Press. Retrieved from <https://trove.nla.gov.au/version/40231055>

Kaufman, B. N., & Kaufman, S. (1976). *Son-Rise*. New York: Harper-Collins.

Kelly, K. J., & Metcalfe, J. (2011). Metacognition of emotional face recognition. *Emotion*, 11(4), 896–906. <https://doi.org/10.1037/a0023746>

Killgore, W.D., & Yurgelun-Todd, D.A. (2007). Neural correlates of emotional intelligence in adolescent children *Cognitive, Affective, & Behavioral Neuroscience*, 7, 140–151. <https://doi.org/10.3758/cabn.7.2.140>

Kim S.H., Hus V., Lord C. (2013) Autism Diagnostic Interview-Revised. In: Volkmar F.R. (eds) *Encyclopedia of Autism Spectrum Disorders*. Springer, New York, NY. <https://doi.org/10.1007/978-1-4419-1698-3>

- Kirst, S., Zoerner, D., Schütze, J., Lucke, U., & Dziobek, I. (2015). Zirkus Empathico: Eine mobile Applikation zum Training sozioemotionaler Kompetenzen bei Kindern im Autismus-Spektrum. *DeLFI*.
- Klem, G. H., Luders, H. O., Jasper, H. H., & Elger, C. (1999). The ten–twenty electrode system of the International Federation: The International Federation of Clinical Neurophysiology. *Electroencephalography and Clinical Neurophysiology*, 52, 3–6. Retrieved from <https://www.semanticscholar.org/paper/The-ten-twenty-electrode-system-of-the-Federation.-Klem-L%C3%BCders/53a7cf6bf8568c660240c080125e55836d507098>
- Klinger, L. G., & Dawson, G. (1996). Autistic disorder. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (pp. 311–339). New York: Guilford Press.
- Kočovská, E., Fernell, E., Billstedt, E., Minnis, H., & Gillberg, C. (2012). Vitamin D and autism: Clinical review. *Research in Developmental Disabilities*, 33(5), 1541–1550. <https://doi.org/10.1016/j.ridd.2012.02.015>
- Kokina, A., Kern, L. (2010). Social Story™ interventions for students with autism spectrum disorders: A meta-analysis. *Journal of Autism and Developmental Disorders*, 40 (7), 812– 826. <https://doi.org/10.1007/s10803-009-0931-0>
- Kranowitz, C. S. (1998). *The out-of-sync child: Recognizing and coping with sensory integration dysfunction*. New York: Skylight Press.
- Krasny, L., Williams, B. J., Provencal, S., & Ozonoff, S. (2003). Social skills interventions for the autism spectrum: Essential ingredients and a model curriculum. *Child and Adolescent Psychiatric Clinics of North America*, 12(1), 107–122. [https://doi.org/10.1016/s1056-4993\(02\)00051-2](https://doi.org/10.1016/s1056-4993(02)00051-2)

- Kristjánsson, K. (2007). *Aristotle, Emotions, and Education*. London: Routledge, <https://doi.org/10.4324/9781315567914>
- Kurtz, L.A. (2008). *Understanding Controversial Therapies for Children with Autism, Attention Deficit Disorder, and Other Learning Disabilities: A Guide to Complementary and Alternative Medicine*. London, UK: Jessica Kingsley Publishers. Retrieved from <http://repository.umpwr.ac.id:8080/bitstream/handle/123456789/492/Understanding%20Controversial%20Therapies%20for%20Children.pdf?sequence=1&isAllowed=y>
- Lai, M.-C., Lombardo, M. V., Chakrabarti, B., & Baron-Cohen, S. (2013). Subgrouping the Autism “Spectrum”: Reflections on DSM-5. *PLoS Biology*, 11(4). <https://doi.org/10.1371/journal.pbio.1001544>
- Landa, R. J., Holman, K. C., O’Neill, A. H., & Stuart, E. A. (2010). Intervention targeting development of socially synchronous engagement in toddlers with autism spectrum disorder: a randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 52(1), 13–21. <https://doi.org/10.1111/j.1469-7610.2010.02288.x>
- Leaf, J. B., Oppenheim-Leaf, M. L., Leaf, R. B., Taubman, M., McEachin, J., Parker, T., et al. (2015). What is the proof? A methodological review of studies that have utilized social stories. *Education and Training in Autism and Developmental Disabilities*, 50(2) 127-141. <https://doi.org/10.1007/s10803-014-2103-0>
- Lerna, A., Esposito, D., Conson, M., Russo, L., & Massagli, A. (2012). Social-communicative effects of the Picture Exchange Communication System (PECS) in Autism Spectrum Disorders. *International Journal of Language & Communication Disorders*, 47(5), 609–617. <https://doi.org/10.1111/j.1460-6984.2012.00172.x>

- Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: conceptualization and measurement. *International journal of aging & human development*, 60(2), 127–143. <https://doi.org/10.2190/XRXM-FYRA-7U0X-GRC0>
- Lewis, G. J., Lefevre, C. E., & Young, A. W. (2016). Functional architecture of visual emotion recognition ability: A latent variable approach. *Journal of experimental psychology. General*, 145(5), 589–602. <https://doi.apa.org/doi/10.1037/xge0000160>
- Liao, S.T., Hwang, Y.S., Chen, Y.J., Lee, P., Chen, S.J., & Lin, L.Y. (2014). Home-based DIR/Floortime™ Intervention Program for Preschool Children with Autism Spectrum Disorders: Preliminary Findings. *Physical & Occupational Therapy In Pediatrics*, 34(4), 356–367. <https://doi.org/10.3109/01942638.2014.918074>
- Linden Lab. (2003). *Second life* (Version 2.1) [Software]: Available from <http://secondlife.com/>
- Lord, C., Rutter, M., & Le Couteur, A. (1994). Autism Diagnostic Interview–Revised: A revised version of a diagnostic interview for caregivers of individuals with possible pervasive developmental disorders. *Journal of Autism and Developmental Disorders*, 24, 659–686. <https://doi.org/10.1007/BF02172145>
- Lord, C., Rutter, M., DiLavore, P. C., Risi, S., Gotham, K., & Bishop, S. L. (2012a). *Autism Diagnostic Observation Schedule, Second Edition (ADOS-2) Manual (Part I): Modules 1-4*. Torrance, CA: Western Psychological Services.
- Lord, C., Storoschuk, S., Rutter, M., & Pickles, A. (1993). Using the ADI-R to diagnose autism in preschool children. *Infant Mental Health Journal*, 14(3), 234–252. [https://doi.org/10.1002/1097-0355\(199323\)14:3%3C234::AID-IMHJ2280140308%3E3.0.CO;2-F](https://doi.org/10.1002/1097-0355(199323)14:3%3C234::AID-IMHJ2280140308%3E3.0.CO;2-F)

- Lutz, A., Greischar, L. L., Rawlings, N. B., Ricard, M., & Davidson, R. J. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences*, 101(46), 16369–16373. <https://doi.org/10.1073/pnas.0407401101>
- Madsen, M., El Kaliouby, R., Goodwin, M., & Picard, R. (2008, October). *Technology for just-in-time in-situ learning of facial affect for persons diagnosed with an autism spectrum disorder*. In Proceedings of the 10th international ACM SIGACCESS conference on Computers and accessibility (pp. 19-26). ACM. <https://doi.org/10.1145/1414471.1414477>
- Mahesh M., Myunghoon B.S. and Balakrishnan P. (2012, December). FaceFetch: A User Emotion Driven Multimedia Content Recommendation System Based on Facial Expression Recognition. *In Proceedings of the 2012 IEEE International Symposium on Multimedia* (pp. 84–87). <https://doi.org/10.1109/ISM.2012.24>
- Main, P.A., Angley, M.T., O'Doherty, C.E. *et al.* The potential role of the antioxidant and detoxification properties of glutathione in autism spectrum disorders: a systematic review and meta-analysis. *Nutrition & Metabolism*, 9(1), 35. <https://doi.org/10.1186/1743-7075-9-35>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Matson, J. L., Fodstad, J. C., & Rivet, T. T. (2009). The relationship of social skills and problem behaviors in adults with intellectual disability and autism or PDD-NOS. *Research in Autism Spectrum Disorders*, 3, 258–268. <https://doi.org/10.1016/j.rasd.2008.07.001>
- Maurice, C., Green, G., & Luce, S. C. (Eds.). (1996). *Behavioral intervention for young children with autism: A manual for parents and professionals*. PRO-ED.

- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: a component of emotional intelligence. *Journal of personality assessment*, 54(3-4), 772–781. <https://doi.org/10.1080/00223891.1990.9674037>
- Mayer, J., Salovey, P., Caruso, D., & Cherkasskiy, L. (2011). Emotional Intelligence. In R. Sternberg & S. Kaufman (Eds.), *The Cambridge Handbook of Intelligence* (Cambridge Handbooks in Psychology, pp. 528-549). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511977244.027>
- Mayer, J.D. & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology*, 4(3), 197–208. [https://doi.org/10.1016/S0962-1849\(05\)80058-7](https://doi.org/10.1016/S0962-1849(05)80058-7)
- McNicholas, J., Collis, G.M. (2006). Animals as social supports: Insights for understanding animal-assisted therapy. In: A.H. Fine, (Eds.), *Handbook on Animal-Assisted Therapy: Theoretical Foundations and Guidelines for Practice* [2nd ed.] (pp. 49-71) San Diego, CA: AcademicPress. Retrieved from [https://www.academia.edu/16450081/Handbook on Animal Assisted Therapy](https://www.academia.edu/16450081/Handbook_on_Animal_Assisted_Therapy)
- Meadows, T. (1997). Music therapy for children with severe and profound multiple disabilities: A review of literature. *Australian Journal of Music Therapy*, 8, 3-17. Retrieved from <https://www.austmta.org.au/journal/article/music-therapy-children-severe-and-profound-multiple-disabilities-review-literature>
- Mesibov, G. B., Shea, V., & Schopler, E. (2004). *The Teacch approach to autism spectrum disorders*. New York: Springer.
- Mesibov, G.B. and Shea, V. (2010). The TEACCH program in the era of evidence-based practice. *Journal of Autism and Developmental Disorders*, 40(5), 570-579. <https://doi.org/10.1007/s10803-009-0901-6>

- Miller, B. (2018). How Kaspar the robot is helping autistic students to socialize. *ABC.net*. Retrieved from <https://www.abc.net.au/news/2018-06-05/the-creepy-looking-robot-teachingkids-social-skills/9832530>
- Mitchell, D. G., & Greening, S. G. (2012). Conscious perception of emotional stimuli: brain mechanisms. *The Neuroscientist: a review journal bringing neurobiology, neurology and psychiatry*, 18(4), 386–398. <https://doi.org/10.1177%2F1073858411416515>
- Montgomery, J. M., Newton, B., & Smith, C. (2008). Test Review: Gilliam, J. (2006). GARS-2: Gilliam Autism Rating Scale—Second Edition. Austin, TX: PRO-ED. *Journal of Psychoeducational Assessment*, 26(4), 395–401. <https://doi.org/10.1177%2F0734282908317116>
- Moore, D., McGrath, P., & Thorpe, J. (2000). Computer-Aided Learning for People with Autism – a Framework for Research and Development. *Innovations in Education and Training International*, 37(3), 218–228. <https://doi.org/10.1080/13558000050138452>
- Moors, A. (2010). *Theories of emotion causation: A review*. In J. De Houwer & D. Hermans (Eds.), *Cognition and emotion: Reviews of current research and theories* (p. 1–37). Psychology Press.
- Movahedi, A., Bahrami, F., Marandi, S. M., & Abedi, A. (2013). Improvement in social dysfunction of children with autism spectrum disorder following long term Kata techniques training. *Research in Autism Spectrum Disorders*, 7(9), 1054–1061. <https://doi.org/10.1016/j.rasd.2013.04.012>
- Mu-oz, R., Barcelos, T., Noël, R., & Kreisel, S. (2012, November). *Development of software that supports the improvement of the empathy in children with autism spectrum disorder*. In 31st International Conference of the Chilean Computer Science Society (pp. 223-228). Valparaíso, Chile. Retrieved from <https://ieeexplore.ieee.org/xpl/conhome/6694055/proceeding>

- Mu-oz, R., Nöel, R., Kreisel, S., & Mancilla, F. (2012). Proyect@Emociones: Software para Estimular el Desarrollo de la Empatía en Niños y Niñas con Trastornos del Espectro Autista. *Congreso Internacional de Informática Educativa*, 17, 59-64. Retrieved from https://www.researchgate.net/publication/234166847_ProyectEmociones_Software_para_Estimular_el_Desarrollo_de_la_Empatia_en_Ninos_y_Ninas_con_Trastornos_del_Espectro_Autista
- Newschaffer, C. J., Croen, L. A., Daniels, J., Giarelli, E., Grether, J. K., Levy, S. E., ... Windham, G. C. (2007). The Epidemiology of Autism Spectrum Disorders. *Annual Review of Public Health*, 28(1), 235–258. <https://doi.org/10.1146/annurev.publhealth.28.021406.144007>
- Norris, M., & Lecavalier, L. (2010). Screening Accuracy of Level 2 Autism Spectrum Disorder Rating Scales: A Review of Selected Instruments. *Autism*, 14(4), 263–284. <https://doi.org/10.1177%2F1362361309348071>
- O’Haire, M. E., McKenzie, S. J., McCune, S., & Slaughter, V. (2014). Effects of Classroom Animal-Assisted Activities on Social Functioning in Children with Autism Spectrum Disorder. *The Journal of Alternative and Complementary Medicine*, 20(3), 162–168. <https://doi.org/10.1089/acm.2013.0165>
- O’Neill, M., & Jones, R. S. P. (1997). Sensory-Perceptual Abnormalities in Autism: A Case for More Research? *Journal of Autism and Developmental Disorders*, 27(3), 283–293. <https://doi.org/10.1023/a:1025850431170>
- Øhrstrøm, P. (2011). Helping autism-diagnosed teenagers navigate and develop socially using e-learning based on mobile persuasion. *The International Review of Research in Open and Distributed Learning*, 12(4), 54-71. <https://doi.org/10.19173/irrodl.v12i4.878>
- Option Institute (2001). *Autism treatment center of America: The son-rise program*. [Brochure] Massachusetts: Author.

- Ottenbacher, K. (1982). Sensory integration therapy: Affect or effect. *American Journal of Occupational Therapy*, 36(9), 571–578. <https://doi.org/10.5014/ajot.36.9.571>
- Ozonoff, S., & Cathcart, K. (1998). Effectiveness of a home program intervention for young children with autism. *Journal of Autism and Developmental Disorders*, 28, 25–32. <https://doi.org/10.1023/A:1026006818310>
- Park, W., Jeong, Y., & Borneman, J. (2011). The effect of psycho-motor play on motor and body perception competence for young children with developmental delays. *South African Journal of Occupational Therapy*, 41, 13–18. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2310-38332011000100005
- Patterson, T. L., Moscona, S., McKibbin, C. L., Davidson, K., & Jeste, D. V. (2001). Social skills performance assessment among older patients with schizophrenia. *Schizophrenia Research*, 48(2-3), 351–360. [https://doi.org/10.1016/s0920-9964\(00\)00109-2](https://doi.org/10.1016/s0920-9964(00)00109-2)
- Pavlidis, M. (2008). *Animal-Assisted Interventions for Individuals with Autism*. London: Jessica Kingsley Publishers.
- Payne, V., & Isaacs, L. (2008). *Human motor development: A lifespan approach* (7th ed.). Boston, MA: McGraw-Hill.
- Pearson. (2009). *Advanced clinical solutions for WAIS-IV and WMS-IV*. San Antonio: Pearson.
- Pennesi, C.M., & Klein, L.C. (2012). Effectiveness of the gluten-free, casein-free diet for children diagnosed with autism spectrum disorder: Based on parental report. *Nutritional Neuroscience*, 15(2), 85-91, <https://doi.org/10.1179/1476830512Y.0000000003>

- Ploog, B. O., Scharf, A., Nelson, D., & Brooks, P. J. (2012). Use of Computer-Assisted Technologies (CAT) to Enhance Social, Communicative, and Language Development in Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 43(2), 301–322. <http://doi.org/10.1007/s10803-012-1571-3>
- Potworowski, G. & Kopelman, S. (2008). Strategic Display and Response to Emotions: Developing Evidence-based Negotiation Expertise in Emotion Management (NEEM). *The International Association for Conflict Management and Wiley Periodicals, Inc.*, 1(4), 333–352. <https://doi.org/10.1111/j.1750-4716.2008.00020.x>
- Prizant, B.M., & Wetherby A.M. (1998). Understanding the continuum of discrete-trial traditional behavioral to social-pragmatic developmental approaches in communication enhancement for young children with autism/PDD. *Seminars in Speech and Language*, 19(4), 329–352. <https://doi.org/10.1055/s-2008-1064053>
- Prothmann, A., Ettrich, C., & Prothmann, S. (2009). Preference for, and responsiveness to, people, dogs and objects in children with autism. *Anthrozoos A Multidisciplinary Journal of The Interactions of People & Animals*, 22(2), 161-171. <https://doi.org/10.2752/175303709X434185>
- Radhakrishna, S., Nagarathna, R., & Nagendra, H. (2010). Integrated approach to yoga therapy and autism spectrum disorders. *Journal of Ayurveda and Integrative Medicine*, 1(2), 120. <https://doi.org/10.4103/0975-9476.65089>
- Reardon, S. (2011). A World of Chronic Disease. *Science*, 333(6042), 558–559. <https://doi.org/10.1126/science.333.6042.558>
- Reynhout, G., Carter, M. (2011). Evaluation of the efficacy of social stories™ using three single subject metrics. *Research in Autism Spectrum Disorders*, 5(2), 885-900. <https://doi.org/10.1016/j.rasd.2010.10.003>

- Rhodes, C. (2014). Do Social Stories help to decrease disruptive behaviour in children with autistic spectrum disorders? A review of the published literature. *Journal of Intellectual Disabilities*, 18(1), 35-50. <https://doi.org/10.1177/1744629514521066>
- Rieffe, C., Meerum Terwogt, M., Petrides, K. V., Cowan, C., Miers, A. C., & Tolland, A. (2007). Psychometric properties of the Emotion Awareness Questionnaire for children. *Personality and Individual Differences*, 43(1), 95–105. <https://doi.org/10.1016/j.paid.2006.11.015>
- Robins, B. & Dautenhahn, K. (2018). Kaspar, the social robot and ways it may help children with autism – an overview. *Enfance*, 1(1), 91-102. <https://doi.org/10.3917/enf2.181.0091>
- Roid, G. H. (2003). *Stanford-Binet Intelligence Scales, Fifth Edition (SB: V)*. Itasca, IL: Riverside Publishing. <https://doi.org/10.1177%2F082957350401900113>
- Rubin, R.S., Munz, D.C., & Bommer, W.H. (2005). Leading from within: The effects of emotion recognition and personality on transformational leadership behavior. *Academy of Management Journal*, 48(5), 845–858. <https://doi.org/10.5465/amj.2005.18803926>
- Rufus Robot, Inc. (2014). *Learning with Rufus: Emotions* (Version 1.0.4) [Mobile application software]. Retrieved from: <http://www.rufusrobot.com/>.
- Saad, K., Abdel-rahman, A. A., Elserogy, Y. M., Al-Atram, A. A., Cannell, J. J., Bjørklund, G., ... Ali, A. M. (2015). Vitamin D status in autism spectrum disorders and the efficacy of vitamin D supplementation in autistic children. *Nutritional Neuroscience*, 19(8), 346–351. <https://doi.org/10.1179/1476830515y.0000000019>
- Saad, M. A. E. (2016). The Effectiveness of Social Stories among Children and Adolescents with Autism Spectrum Disorders: Meta-Analysis. *International Journal of Psycho-Educational Sciences*, 5(2), 51-60.

Samsung LOOK AT ME (2014). *LOOK AT ME* (Version 3.12.20141219) [Mobile application software]. Retrieved from: <https://news.samsung.com/global/samsung-introduces-look-at-me-app-to-help-children-with-autism-communicate-better>

Sartorato, F., Przybylowski, L., & Sarko, D. K. (2017). Improving therapeutic outcomes in autism spectrum disorders: Enhancing social communication and sensory processing through the use of interactive robots. *Journal of psychiatric research*, 90, 1–11. <https://doi.org/10.1016/j.jpsychires.2017.02.004>

Schopler, E. (1965). Early infantile autism and receptor processes. *Archives of General Psychiatry*, 13(4), 327–335. <https://doi.org/10.1001/archpsyc.1965.01730040037007>

Schopler, E., Reichler, R. J., & Renner, B. R. (1986). *The childhood autism rating scale (CARS): For diagnostic screening and classification of autism*. New York: Irvington.

Schopler, E., Reichler, R. J., DeVellis, R. F., & Daly, K. (1980). Toward objective classification of childhood autism: Childhood Autism Rating Scale (CARS). *Journal of Autism and Developmental Disorders*, 10(1), 91–103. <https://doi.org/10.1007/BF02408436>

Schopler, E., Reichler, R. J., DeVellis, R. F., & Daly, K. (1980). Toward objective classification of childhood autism: Childhood Autism Rating Scale (CARS). *Journal of Autism and Developmental Disorders*, 10, 91-103. <https://doi.org/10.1007/BF02408436>

Screaming Bee. (2005). *MorphVox* (Version 3.4.18) [Software]: Available from <http://www.screamingbee.com/product/MorphVOX.aspx>

Seida, J. K., Ospina, M. B., Karkhaneh, M., Hartling, L., Smith, V., & Clark, B. (2009). Systematic reviews of psychosocial interventions for autism: an umbrella review. *Developmental Medicine & Child Neurology*, 51(2), 95–104. <https://doi.org/10.1111/j.1469-8749.2008.03211.x>

- Shamsuddin, S., Yusoff, Ha., Ismail, L., Mohamed, S., Hanapiah, F., & Zahari, N. (2012). Humanoid Robot NAO Interacting with Autistic Children of Moderately Impaired Intelligence to Augment Communication Skills. *Procedia Engineering*, 41, 1533-1538. <https://doi.org/10.1016/j.proeng.2012.07.346>
- Shane, H. C., & Albert, P. D. (2008). Electronic screen media for persons with autism spectrum disorders: Results of a survey. *Journal of autism and developmental disorders*, 38(8), 1499-1508. <https://doi.org/10.1007/s10803-007-0527-5>
- Shannahoff-Khalsa, D. S. (2007). Selective Unilateral Autonomic Activation: Implications for Psychiatry. *CNS Spectrums*, 12(8), 625–634. <https://doi.org/10.1017/s1092852900021428>
- Shroff, R. H., & Keyes, C. J. (2017). A proposed framework to understand the intrinsic motivation factors on university students' behavioral intention to use a mobile application for learning. *Journal of Information Technology Education: Research*, 16, 143-168. <https://doi.org/10.28945/3694>
- Simons, J., Simons, J., Leitschuh, C., & Raluca Popa, M. (2011). The effect of body awareness training of pre-school children based on the Sherborne Developmental Movement method versus regular physical education class. *European Psychomotricity Journal*, 4, 38 –50. Retrieved from https://www.psychomotor.gr/images/journal/Volume4/first_issue/6.SIMONS_38_50.pdf
- Sonne, T., & Jensen, M. M. (2016). *ChillFish: A Respiration Game for Children with ADHD*. In: Proceedings of the TEI '16: Tenth International Conference on Tangible, Embedded, and Embodied Interaction - TEI '16 (pp. 271–278). <https://doi.org/10.1145/2839462.2839480>
- Sonne, T., Marshall, P., Müller, J., Obel, C., & Grønbaek, K. (2016). *A Follow-up Study of a Successful Assistive Technology for Children with ADHD and Their Families*. In: Proceedings of the The 15th International Conference on Interaction Design and Children (IDC '16) (pp. 400-407). <https://doi.org/10.1145/2930674.2930704>

- Sparrow, S. S., Balla, D. A., & Cicchetti, D. V. (1984a). *Vineland Adaptive Behavior Scales interview edition expanded form manual*. Circle Pines, MN: American Guidance Service.
- Sparrow, S., Balla, D. & Cicchetti, D (1984b). *Vineland Adaptive Behavior Scales (Expanded Form)*. Circle Pines, MN: American Guidance Service.
- Sparrow, S., Balla, D. & Cicchetti, D (1985). *Vineland Adaptive Behavior Scales (Classroom Edition)*. Circle Pines, MN: American Guidance Service.
- Strain, P. S., & Schwartz, I. (2001). ABA and the Development of Meaningful Social Relations for Young Children with Autism. *Focus on Autism and Other Developmental Disabilities*, 16(2), 120–128. <https://doi.org/10.1177/108835760101600208>
- Sung, A. N., Bai, A., Bowen, J. G., Xu, B., Bartlett, L. M., Sanchez, J. C., ... & Tanaka, J. W. (2015). From the small screen to the big world: mobile apps for teaching real-world face recognition to children with autism. *Advanced Health Care Technologies*, 1, 37-45. <https://doi.org/10.2147/AHCT.S64483>
- Tantam, D. (2003). The challenge of adolescents and adults with Asperger syndrome. *Child and Adolescent Psychiatric Clinics of North America*, 12(1), 143–163. [https://doi.org/10.1016/s1056-4993\(02\)00053-6](https://doi.org/10.1016/s1056-4993(02)00053-6)
- The Aurora Project (1998). *The Aurora Project*. Retrieved from <http://aurora.herts.ac.uk>
- Touch Autism (2012). *Emotions and Feelings Social Story* (Version 3.2) [Mobile application software]. Retrieved from: <http://appshopper.com/education/emotions-and-feelings-social-story>
- Travis, F., Haaga, D. A. F., Hagelin, J., Tanner, M., Arenander, A., Nidich, S., ... Schneider, R. H. (2009). A self-referential default brain state: patterns of coherence, power, and eLORETA sources during

eyes-closed rest and Transcendental Meditation practice. *Cognitive Processing*, 11(1), 21–30.
[HYPERLINK "https://doi.org/"https://doi.org/10.1007/s10339-009-0343-2](https://doi.org/10.1007/s10339-009-0343-2)

Twachtman-Cullen, D. (2006). Communication and stress in students with autism spectrum disorders. In: M. G. Baron, J. Groden, G. Groden & L. P. Lipsitt (Eds), *Stress and Coping in Autism* (pp.302–323). Oxford: Oxford University Press. <https://doi.org/10.1093/med:psych/9780195182262.001.0001>

Van Bourgondien, M. E. & Coonrod, E. (2013). *TEACCH: An intervention approach for children and adults with autism spectrum disorders and their families*. In S. Goldstein & J. A. Naglieri (Eds.), *Interventions for autism spectrum disorders: Translating science into practice* (pp. 59-73). New York: Springer.

Van der Oord, S., Van der Meulen, E. M., Prins, P. J. M., Oosterlaan, J., Buitelaar, J. K., & Emmelkamp, P. M. G. (2005). A psychometric evaluation of the social skills rating system in children with attention deficit hyperactivity disorder. *Behaviour Research and Therapy*, 43(6), 733–746.
<https://doi.org/10.1016/j.brat.2004.06.004>

Van Wingen, G., Mattern, C., Verkes, R. J., Buitelaar, J., & Fernández, G. (2010). Testosterone reduces amygdala–orbitofrontal cortex coupling. *Psychoneuroendocrinology*, 35(1), 105–113.
<https://doi.org/10.1016/j.psyneuen.2009.09.007>

Vandergrift, L. (2005). Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics*, 26(1), <https://doi.org/10.1093/applin/amh039>

Vélez, P., & Ferreiro, A. (2014). Social robotic in therapies to improve children's attentional capacities. Review of the Air Force Academy, (2), 101. Retrieved from <https://pdfs.semanticscholar.org/6538/4e96aa01fa48ce657438049285fbf0125311.pdf>

- Venter, H.J. (2017). Self-Transcendence: Maslow's Answer to Cultural Closeness. *Journal of Innovation Management*, 4(4), 3–7. Retrieved from <https://hdl.handle.net/10216/102610>
- Virtual Eye See Inc. (2014). *Discovering Emotions with Zeely* [Mobile application software]. Retrieved from: <http://zeelyadventures.com/>
- Volkmar, F. R. (2001). Pharmacological interventions in autism: Theoretical and practical issues. *Journal of Clinical and Childhood Psychology*, 30(1), 80-87. https://doi.org/10.1207/S15374424JCCP3001_9
- Volkmar, F. R., Sparrow, S. S., Goudreau, D., Cicchetti, D. V., Paul, R., & Coehn, D. J. (1987). Social Deficits in Autism: An Operational Approach Using the Vineland Adaptive Behavior Scales. *Journal of the American Academy of Child & Adolescent Psychiatry*, 26(2), 156–161. <https://doi.org/10.1097/00004583-198703000-00005>
- Voon, N. H., Bazilah, S. N., Maidin, A., Jumaat, H., & Ahmad, M. Z. (2015). Autisay: A mobile communication tool for autistic individuals. In *Computational Intelligence in Information Systems* (pp. 349-359). Springer, Cham. https://doi.org/10.1007/978-3-319-13153-5_34
- Walker, M. & Armfield, A. (1981). What is the Makaton Vocabulary? *British Journal of Special Education*, 8(3), 19–20. <https://doi.org/10.1111/j.1467-8578.1981.tb00437.x>
- Walker, M., Parsons, F.S., Cousins, S., Henderson, R., & Carpenter, B. (1985) *Symbols for Makaton*. Makaton Vocabulary Development Project. Camberley, Surrey.
- Watson, L.R., Lord, C., Schaffer, B. & Schopler, E. (1989). *Teaching spontaneous communication to autistic and developmentally handicapped children*. Austin, TX: Pro- Ed.

WebTeam Corporation. *What's the Expression-All Ages* (Version 2.0.0) [Mobile Application Software]. Retrieved from: <https://apps.apple.com/eg/app/whats-expression-all-ages/id505096524?preserveScrollPosition=true>

Wechsler, D. (1999). Wechsler abbreviated scale of intelligence (WASI). San Antonio: The Psychological Corporation.

Welch K.C., Lahiri U., Warren Z., Sarkar N. (2010). "An Approach to the Design of Socially Acceptable Robots for Children with Autism Spectrum Disorders," *International Journal of Social Robotics*, 2, 391-403. <https://doi.org/10.1007/s12369-010-0063-x>

Whalen, C., Schreibman, L., & Ingersoll, B. (2006). The Collateral Effects of Joint Attention Training on Social Initiations, Positive Affect, Imitation, and Spontaneous Speech for Young Children with Autism. *Journal of Autism and Developmental Disorders*, 36, 655–664. <https://doi.org/10.1007/s10803-006-0108-z>

Wheaton, A. (2012). Metacognition and emotional intelligence. *Australian Educational Leader*, 34(1), 38–41. Retrieved from <https://search.informit.com.au/documentSummary;dn=896734504722203;res=IELAPA>

White, S. W., Keonig, K., & Scahill, L. (2007). Social skills development in children with autism spectrum disorders: a review of the intervention research. *Journal of Autism and Developmental Disorders*, 37(10), 1858-1868. <https://doi.org/10.1007/s10803-006-0320-x>

Whiteley, P., Haracopos, D., Knivsberg, A.M., Reichelt, K.L., Parlar, S., Jacobsen, J., Seim, A., Pedersen, L., Schondel, M., & Shattock, P. (2010). The ScanBrit randomized, controlled, single-blind study of a gluten- and casein-free dietary intervention for children with autism spectrum disorders. *Nutritional Neuroscience*, 13(2), 87–100. <https://doi.org/10.1179/147683010X12611460763922>

- William, J., Rickert, V., Hogan, J., Zolten, A. J., Satz, P., D'Elia, L. F., Asarnow, R. F., Zaucha, K., & Light, R. (1995). Children's Color Trails. *Archives of Clinical Neuropsychology*, 10(3), 211–223. [https://doi.org/10.1016/0887-6177\(94\)00041-N](https://doi.org/10.1016/0887-6177(94)00041-N)
- Wilmshurst, L. (2008). *Abnormal child psychology: A developmental perspective*. Routledge/Taylor & Francis Group. <https://doi.org/10.4324/9780203893258>
- Wing, L. (1978). *Social, behavioral and cognitive characteristics: An epidemiological approach*. In M. Rutter & E. Schopler (Eds.), *Autism: A reappraisal of concepts and treatment*. New York: Plenum Press.
- World Health Association (1993). The ICD-10 classification of mental and behaviour disorders: diagnostic criteria for research. Geneva: World Health Organization.
- Yang, C. H., Maher, J. P., & Conroy, D. E. (2015). Implementation of behavior change techniques in mobile applications for physical activity. *American journal of preventive medicine*, 48(4), 452-455. <https://doi.org/10.1016/j.amepre.2014.10.010>
- Yee, H. (2011). Mobile Technology for Children with Autism Spectrum Disorder: Major Trends and Issues. *IEEE Symposium on E-Learning, E-Management and E-Services (IS3e)*, Kuala Lumpur, 21-24 October 2012, 1-5.
- Young, A., Perrett, D., Cabler, A., Sprengelmeyer, R., & Ekman, P. (2002). *Facial expressions of emotion: Stimuli and tests (FEEST)*. St. Edmunds: Thames Valley Test Company.
- Yousif, J. H., Kazem, H. A., Chaichan, M.T. (2019). Evaluation Implementation of Humanoid Robot for Autistic Children: A Review. *International Journal of Computation and Applied Sciences*, 6(1), 412-420. Retrieved from

https://www.researchgate.net/publication/331162555_Evaluation_Implementation_Of_Humanoid_Robot_For_Autistic_Children_A_Review

Zachor, D. A., Ben-Itzhak, E., Rabinovich, A. L., & Lahat, E. (2007). Change in autism core symptoms with intervention. *Research in Autism Spectrum Disorders*, 1(4), 304–317.
<https://doi.org/10.1016/j.rasd.2006.12.001>

Zoerner, D., Schütze, J., Kirst, S., Dziobek, I., & Lucke, U. (2016, July). *Zirkus Empathico: Mobile Training of Socio-Emotional Competences for Children with Autism*. In 2016 IEEE 16th International Conference on Advanced Learning Technologies (ICALT) (pp. 448- 452). Austin, TX, USA.
<https://doi.org/10.1109/ICALT.2016.146>

Ελληνόγλωσση Βιβλιογραφία

Γενά, Α. (2002). *Αυτισμός και Διάχυτες Αναπτυξιακές Διαταραχές: Εφαρμογές ενός θεραπευτικού και παιδαγωγικού μοντέλου*. Αθήνα: Έκδοση της συγγραφέως.