

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

**EXPLORING THE THEORY OF MIND IN STUDENTS WITH ASPERGER
SYNDROME AND IN HIGH FUNCTIONAL AUTISM**

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THESIS

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Abstract

The aim of this work was to investigate the relationship of Mind theory to students with high functional autism - Asperger syndrome.

The researches investigated for emotional expressiveness in the family concerned parents and more specifically the positive and negative expression of their emotions. The bibliographic review has generally revealed that emotional expressiveness in the family is related and affects the emotional capacity of children with high functioning autism - Asperger syndrome. The positive emotional expression of parents is positively related to the emotional understanding of children with high functioning autism - Asperger syndrome, that is, as parents are more often expressed with positive feelings, children tend to understand their feelings more and more. The findings for negative emotional expressiveness, however, are contradictory as they are sometimes related to high and sometimes to low understanding of feelings by children with high functioning autism - Asperger syndrome. On the other hand, from all the research, a relationship emerged between the emotional expressiveness of the parents and the Theory of the Mind of Children.

Finally, the positive relationship between emotional understanding and Theory of the mind of a child with high functioning autism - Asperger syndrome is confirmed. But the effects on the effect are ambiguous, as in some research, the Theory of the Mind appears first and contributes to the development of emotional comprehension, while in others the opposite is observed.

Keywords:

Mind theory, students with high functioning autism, Asperger syndrome

References

- Αντωνοπούλου, Α., & Μιλτσακάκη, Χ. (2011). Δυνατότητες και δυσκολίες στη συμπεριφορά του εφήβου, συναισθηματική νοημοσύνη και εκφραστικότητα: Εξέταση της μεταξύ τους σχέσης. *Παιδαγωγικός Λόγος*, 1, 11-25.
- Αυτισμός, Μετ. Καφαντάρης Ι., Αθήνα: Ελληνική Εταιρεία Προστασίας Αυτιστικών Ατόμων.
- Astington, J. W., & Edward, M. J. (2010). The development of theory of mind in early childhood. In R. E. Tremblay, R. G. Barr, R. De V. Peters & M. Boivin (Eds.) *Encyclopedia on Early Childhood Development* [online], (pp. 1-6). Montreal, Quebec: Centre of Excellence for Early Childhood Development.
- Astington, J. W. (1996). What is theoretical about the child's theory of mind. A Vygotskian view of its development. In P. Carruthers, P. K. Smith (Eds.), *Theories of Theories of Mind*, (pp. 184-199). New York, NY: Cambridge University Press.
- Attwood, T. (2007). *Σύνδρομο Asperger: Ένας πλήρης οδηγός*. Αθήνα: Εκδόσεις Ελληνικά γράμματα.
- Attwood, I. (2005). Παιδιά με Ιδιαιτερότητες στη Γλωσσική Ανάπτυξη και την Κοινωνική Αλληλεπίδραση. Αθήνα: Σαββάλας.
- Autism Society of North Carolina, (1997), Εισαγωγή στον Αυτισμό: Είκοσι Ερωτήσεις και Απαντήσεις, Αθήνα, Ελληνική Εταιρεία Προστασίας Αυτιστικών Ατόμων.
- Βουτυρά, Α. (2009). *Ο ρόλος της έκφρασης συναισθημάτων μέσα στην οικογένεια και της συναισθηματικής νοημοσύνης νεαρών ατόμων στις ακαδημαϊκές τους επιδόσεις*. Διδακτορική Διατριβή. Παιδαγωγική Ψυχολογία και Εκπαιδευτική Πράξη. Αθήνα: Χαροκόπειο Πανεπιστήμιο.

Banerjee, R. (2004). The role of social experience in advanced social understanding. *Behavioral and brain Sciences*, 27(1), 97-98.

Bennett, D. S., Bendersky, M., & Lewis, M. (2005). Antecedents of emotion knowledge: Predictors of individual differences in young children. *Cognition and Emotion*, 19, 375–396.

Bennett, M., & Matthews, L. (2000). The role of second-order belief-understanding and social context in children's self-attribution of social emotions. *Social Development*, 9, 126-130.

Boyd, B. (2009). *Appreciating Asperger Syndrome. Looking at the upside- with 300 positive points*. London and Philadelphia: Jessica Kingsley Publishers.

Boyd, B. (2003). *Parenting a child with Asperger Syndrome. 200 tips and strategies*. London and New York: Jessica Kingsley Publishers.

Γενά, Α. (2002). *Αυτισμός και Διάχυτες Αναπτυξιακές Διαταραχές*. Αθήνα: αυτοέκδοση.

Creswell, John W., (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California, SAGE Publications, Inc.

Cutting, A. L., & Dunn, J. (1999). Theory of mind, emotion understanding, language and family background: Individual differences and interrelations. *Child Development*, 70(4), 853-865.

Δασκαλάκη, Α. (2010). Η ανάπτυξη της θεωρίας του νου και η ικανότητα κατανόησης συναισθημάτων σε παιδιά προσχολικής ηλικίας. Διπλωματική εργασία ΠΜΣ Παιδαγωγική Ψυχολογία και Εκπαιδευτική Πράξη. Αθήνα: Χαροκόπειο Πανεπιστήμιο.

DSM- IV. (1996). *Διαγνωστικά Κριτήρια*. Αθήνα: Ιατρικές Εκδόσεις Λίτσας.

Dunn, J. (1999a). *Οι στενές προσωπικές σχέσεις των μικρών παιδιών*. Αθήνα: Τυπωθήτω.

Dunn, J. (1999b). Making sense of the social world: Mindreading, emotion, and relationships. In P. D. Zelazo, J. W. Astington, & D. R. Olson (Eds.), *Developing theories of intention: Social understanding and self-control* (pp. 229-242). Mahwah, NJ: Lawrence Erlbaum Associates.

Dunn, J., & Plomin, R. (1990). *Separate lives: Why siblings are so different*. New York, NY: Basic Books.

Duval, C., Piolino P., Bejanin A., Eustache F., & Desgranges, B. (2011). Age effects on different components of theory of mind. *Consciousness & Cognition*, 20(3), 627-642.

Eggum, N. D., Eisenberg, N., Kao, K., Spinrad, T. L., Bolnick, R., Hofer, C., Fabricius, W. V. (2011). Emotion understanding, theory of mind, and prosocial orientation: Relations over time in early childhood. *The Journal of Positive Psychology*, 6(1), 4-16.

Galende N., Sánchez M., Arranz E. (2012). The role of parent's distancing strategies in the development of five-year-old children's theory of mind. *Early Child Development and Care*, 182(2), 207-220.

Happe, F. (2003). *Αυτισμός: Σύγχρονη Ψυχολογική Θεώρηση*. (Μτφ Δ. Στασινός). Αθήνα: Εκδόσεις Gutenberg.

Happe F., (1998), *Αυτισμός: Ψυχολογική Θεώρηση*, Αθήνα. Gutenberg.

Happe, F. (1995). Understanding minds and metaphors: Insights from the study of figurative language in autism. *Metaphor & Symbol*, 10 (4), 275- 295.

Happe, F. (1993). Communicative competence and theory of mind in autism: A test of relevance theory. *Cognition*, 48 (2), 101- 119.

Harris, P. L., De Rosnay, M., & Pons, F. (2005). Language and children's understanding of mental states. *Current Directions in Psychological Science*, 14(2), 69-73.

Harwood, M. D., & Farrar, M. J. (2006). Conflicting emotions: The connection between affective perspective taking and theory of mind. *British Journal of Developmental Psychology*, 24(2), 401-418.

ICD-10. (1993). *Ταξινόμηση Ψυχικών Διαταραχών και Διαταραχών της Συμπεριφοράς. Κλινικές Περιγραφές και Οδηγίες για τη Διάγνωση*. Αθήνα: Εκδόσεις Βήτα.

Jordan R., (1996), *Autism: An introduction Handbook for Practitioners*, School of Education, University of Birmingham.

Jordan R., (1995), *Understanding and Teaching children with Autism*, Chichester, Wiley.

Κάκουρος, Ε., & Μανιαδάκη, Κ., (2006). *Ψυχοπαθολογία παιδιών και εφήβων: Αναπτυξιακή προσέγγιση*. Αθήνα: Τυπωθήτω- Γιώργος Δάρδανος.

Κάκουρος Ε., Μανιαδάκη Κ., (2002), *Ψυχοπαθολογία Παιδιών και Εφήβων*, Αθήνα, Τυποθήτω.

Καλύβα Ε., (2005), *Αυτισμός – Εκπαιδευτικές και Θεραπευτικές Προσεγγίσεις*, Αθήνα, Παπαζήση.

- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2, 217-250.
- Keceli Kaysili, B. & Acarlar, F. (2011). The Development of Theory of Mind According to False Belief Performance of Children Ages 3 to 5. *Educational Sciences: Theory and Practice*, 11(4), 1821-1826.
- Klin, A., Lang, J., Cicchetti, V. & Volkmar, F. R. (2000). Brief report: Interrater reliability of clinical diagnosis and DSM-IV criteria for autistic disorder: Results of the DSM-IV autism field trial. *Journal of Autism and Developmental Disorders*, 30, 163-167.
- Klin, A., Volkmar, F.R., Sparrow, S.S., Cicchetti, D.V. & Rourke, B.P. (1995). Validity and neuropsychological characterization of Asperger Syndrome: Convergence with Nonverbal Learning Disabilities Syndrome. *Journal of Child Psychology and Psychiatry*, 36, 1127-1140.
- Kubicek L., (1990), Organization in 2 mother-infant interactions involving a normal infant and his fraternal twin brother, who has later diagnosed as autistic. In S.Goldberg High Risk Infants and Children, London, Academic Press.
- Lagattuta, K., & Wellman, H. (2001). Thinking about the past: Early knowledge about links between prior experience, thinking and emotion. *Child Development*, 72(1), 82-102.
- Lagattuta, K., Wellman, H., & Flavell, J. (1997). Preschoolers' understanding of the link between thinking and feeling: Cognitive cueing and emotional change. *Child Development*, 68(6), 1081-1104.
- Lawrence, C. (2010). *Successful school change and transition for the child with Asperger Syndrome. A guide for parents*. London and Philadelphia: Jessica Kngsley Publishers.

Lord, C. (1988). Enhancing communication in adolescents with autism. *Topics in Language Disorders*, 9, 72-81.

Μαριδάκη- Κασσωτάκη, Α. (2011). Συναισθηματική Νοημοσύνη: Εννοιολογικές διασαφήσεις, θεωρητικά μοντέλα, αξιολόγηση και πρακτικές εφαρμογές, *Επιστήμες Αγωγής*, 1, 47-61.

Μαριδάκη-Κασσωτάκη, Α. (1999). Σύγχρονες απόψεις για τη σκέψη του παιδιού. Αθήνα: Γρηγόρης.

Μισαηλίδη, Π. (2003). *Η θεωρία των παιδιών για το νου*. Αθήνα: Τυπωθήτω.

MacDonald, J.D. (2004). *Communicating partners. 30 years of building responsive relationships with late-talking children including Autism, Asperger's Syndrome (ASD), Down Syndrome, and Typical Development. Development guides for professionals and parents*. London and Philadelphia: Jessica Kingsley Publishers.

Mesibov, G.B., Shea, V. & Adams, L.W. (2002). *Understanding Asperger Syndrome and High Functioning Autism*. New York: Kluwer Academic Publishers.

Mitchell, P. (2002). *Η κατανόηση του νου στην παιδική ηλικία*. Τυπωθήτω: Αθήνα.

Mizokawa, A., & Koyasu, M. (2012). Children's understanding of hidden emotion, theory of mind, and peer relationship. Proceedings of the 34th Annual Meeting of the *Cognitive Science Society*, 2025-2030.

Mizokawa, A. & Koyasu, M. (2007). Young children's understanding of another's apparent crying and its relationship to theory of mind. *Psychologia*, 50(4), 291-307.

Nelson, J. A., O' Brien, M., Calkins, S. D., Leerkes, E. M., Marcovitch, S., & Blankson, A. N. (2012). Maternal expressive style and children's emotional development. *Infant and Child Development*, 21(3), 267-286.

O'Brien, M., Weaver, J. M., Nelson, J. A., Calkins, S., Leerkes, E., & Marcovitch, S. (2011). Longitudinal associations between children's understanding of emotions and theory of mind. *Cognition and Emotion*, 25(6), 1074-1086.

O'Neill, D. K., Astington, J. W., & Flavell, J. H. (1992). Young children's understanding of the role that sensory experiences play in knowledge acquisition. *Child Development*, 63(2), 474-490.

O'Neill, D. K., & Gopnik, A. (1991). Young children's understanding of the sources of their beliefs. *Developmental Psychology*, 27(3), 390-397.

Pavarini, G., de Hollanda Souza, D., & Hawk, C. K. (2013). Parental practices and theory of mind development. *Journal of Child and Family Studies*, 22(6), 844-853.

Piaget, J. (1952). *The Origin of Intelligence in Children*. New York, NY: International University Press.

Piaget, J. (1950). *The psychology of intelligence*. London: Kegan Paul, Trench & Trubner.

Piaget, J. (1945/1962). *Play, dreams, and imitation in childhood*. New York, NY: Norton.

Piaget, J. (1929). *The child's conception of the world*. London: Kegan Paul, Trench & Trubner.

Piaget, J. (1929). *The Language and Thought of the Child*. London: Routledge & Kegan Paul.

Piaget, J. (1928). *Judgment and Reasoning in the Child*. London: Kegan Paul, Trench & Trubner.

Pons, F. Harris, P., & de Rosnay, M. (2004). Emotion comprehension between 3 and 11 years: Developmental periods and hierarchical organization. *European Journal of Developmental Psychology*, 1(2) 127-152.

Pons, F., Harris, P. L., & de Rosnay, M. (2000). La compréhension des émotions chez l'enfant. *Psychoscope*, 21, 29-32.

Ruffman, T., & Keenan, T. R. (1996). "The belief-based emotion of surprise: The case for a lag in understanding relative to false belief." *Developmental Psychology*, 32(1), 40-49.

Συριοπούλου, Χ., Κασίμος, Δ. & Ζαφειρίου, Δ. (2011). Αναπτυξιακά Διαγνωστικά κριτήρια και μέσα αξιολόγησης του αυτισμού και άλλων διάχυτων αναπτυξιακών διαταραχών. *Παιδιατρική Εταιρία Β. Ελλάδος*, 22 (4), 357-363.

Seidenfeld A. M., Johnson, S. R., Cavadel, E. W., & Izard, C. E. (2014). Theory of mind predicts emotion knowledge development in head start children. *Early Education and Development*. 25(7), 933-948.

Syriopoulou-Delli, Christine & Tarara, Efraxia. (2018). Η διερεύνηση της αυτό-αποτελεσματικότητας, του άγχους και της επαγγελματικής εξουθένωσης των εκπαιδευτικών ατόμων με Διαταραχή Φάσματος Αυτισμού,. *Νέα Παιδεία*. 167.

Syriopoulou-Delli, Christine & Varveris, Asimis & Geronta, Alexandra. (2016). Application of the Theory of Mind, Theory of Executive Functions and Weak Central Coherence Theory to Individuals with ASD. *Journal of Educational and*

Developmental Psychology. 7. 102. 10.5539/jedp.v7n1p102.

Tamis-LeMonda, C. S., & Bornstein, M. H. (1991). Individual variation, correspondence, stability, and change in mother and toddler play. *Infant Behavior and Development*, 14(2), 143-162.

Tomasello, M. (2003). *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Cambridge, MA: Harvard University Press.

Turnbull, W., Carpendale, J. I. M., & Racine, T. (2009). Talk and children's understanding of the mind. *Journal of Consciousness Studies*, 16(6-8), 140-166.

Weimer, A. A., Sallquist, J., & Bolnick, R. R.(2012). Young children's emotion comprehension and theory of mind understanding. *Early Education & Development*, 23(3), 280-301.

Weimer, A. A., & Guajardo, N. R. (2005). False belief, emotion understanding, and social skills among head start and non-head start children. *Early Education & Development*, 16(3), 341-366.

Wellman H.M., (1990), *The child's Theory of Mind*, Cambridge, MIT Press.

Wellman, H. M. (1990). *The child's theory of mind*, Cambridge, MA: MIT Press.

Wellman, H. M., Cross, D., & Watson, J. (2001). Meta-analysis of theory of-mind development: The truth about false belief. *Child Development*, 72(3), 655-684.

Welton, J. (2004). *Can I tell you about Asperger Syndrome? A guide for friends and family*. London and Philadeplia: Jessica Kingsley Publishers.

Wing, L. (2000). Το αυτιστικό φάσμα. Ένας οδηγός για γονείς και επαγγελματίες. Αθήνα. Ελληνική Εταιρία Προστασίας Αυτιστικών Ατόμων.

Wright, C., & Mahfoud, J. (2012). A child-centred exploration of the relevance of family and friends to theory of mind development. *Scandinavian Journal of Psychology*, 53(1), 32-40.

<http://digilib.lib.unipi.gr/dspace/community-list>

<http://elocus.lib.uoc.gr>

<http://athena.teipat.gr>

<http://nemertes.lis.upatras.gr/jspui/>

<http://argo.ekt.gr>

<http://estia.hua.gr:8080/dspace/>

<http://openarchives.gr>,