TechHub Journal Vol. 2, No. 2 pp.82-97 (2022)
ISSN: 2810-2800
www.techhubresearch.com

Special nutrition for Students with Special Education Needs, and the ICT's role for their Health education.

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Abstract: The existence of neurological disorders has been intense in recent years. Many researchers are dealing with methods that help to reduce the symptoms of these disorders. Nutrition is very important for human health, so, logically, it is considered essential for the health of those suffering from neurological disorders too. The functional development of these individuals is reduced and proper nutrition helps the good functioning of the brain. Diets such as the Mediterranean and diets with a high content of nutrients are effective in many types of disorders such as autism and Attention deficit hyperactivity disorder (ADHD). Diets with omega-3 fats, iron, etc., and diets without added sugar, chemical substances, or gluten have equally positive results on the behavior of individuals with disorders.

Keywords: autism, ADHD, diets, vitamins, nutrients, sugar, chemicals

Introduction

Attention deficit hyperactivity disorder is described as the most common neurobehavioral condition of childhood. ADHD is a collective of symptoms like hyperactivity, inattention, and impulsivity. These symptoms are considered "comorbid" with emotional, psychological, behavioral, or learning problems. Every child with this disorder must take educational, psychiatric, and psychological interventions (Furman, 2005).

Another neurodevelopmental disorder is autism. This is not a disease but is a complex, behavioral syndrome with multiple causes. The three domains that characterized autism are social interaction, communication, and the lack of interests and activities (Muhle, Trentacoste & Rapin, 2010). The number of children with autistic spectrum disorders is increased. A diagnosis of autism can be reliably made between 2 and 3 years of age and early intervention may improve long-term outcomes (Baird, Cass & Slonims, 2003).

Van de Sande, Buul & Brouns (2014) report about autism that has been found a majority of children with autistic spectrum disorders (ASD) display gastrointestinal symptoms and increased intestinal permeability. Moreover, nutrition-related factors have been hypothesized to play a role in etiology and its symptoms. Children with autism often present gastrointestinal problems because of the abnormalities in digestion and absorption of carbohydrates.

Moreover, the dietary models have proved to be relevant to the individual behavior of ADHD children. Some studies have analyzed the contribution of minerals to ADHD

occurrence. More specifically the deficiency of zinc and iron has been observed in children with ADHD (Granero, Pardo-Garrido, et al 2021).

In general, adequate dietary nutrients are essential for the growth, health, and development of children. Inappropriate nutrition can also lead to many chronic diseases, something which set the stage for health problems in adulthood. The typically developing or non-typically developing children are good to establish healthy habits that remain for their entire lives (Bartolo, 2014).

1. Diet factors for ADHD

The difficulties in cognitive and metacognitive functions are common in neurological disorders. The development of these functions can be achieved with alternative types of intervention. Science exams the therapeutic effects of food. The main nutrients that seem to be useful in ADHD are minerals - such as magnesium, iron, zinc - vitamins and polyunsaturated acids. They shed light on recent research that the oligoantigenic diet seems to have positive effects on attention deficit and hyperactivity. Furthermore, some studies claim that phytocannabinoids increase dopamine concentrations and release serotonin all of which help with the symptoms of ADHD. The results and references notwithstanding, physical exercise is also remarkable for the alternative types of treatment for ADHD (Drigkas & Doulou, 2022).

Based the all of the above, Ríos-Hernández, Alda, et al (2017) concluded that a well-balanced diet should be included in ADHD. More specifically this paper refers to the effect of the Mediterranean diet. The study took place at the Ethical Committee of the Hospital of Sant Joan de Deu and the participants were diagnosed with ADHD. The tools used were the Food-Frequency Questionnaire (FFQ) and the KIDMED test too. The findings of the research showed a relationship between the Mediterranean diet and ADHD diagnoses. The diet quality may have an impact on mental health. Some examples are that iron, omega 3 and zinc are lacking in the diet of the individual with ADHD. In addition, the ADHD people appeared to be eating more fast food than the controls of the research. Statistical differences were found between people with and without ADHD. The controls had consumed fewer drinks, sugar and candy but more vegetables, fruits and fish than individuals with ADHD.

This literature study agrees with the above in which is adduced the relationship between the magnesium, zinc, iron, copper, selenium and ADHD. First of all magnesium is very important for involving protein, for cells energy and low levels of it have be blamed for chronic disease. Magnesium deficient is linked with cognitive disability, attention and aggression. Iron also plays an important role in basic brain function and its lack affect the social and emotional function in children. The trace element zinc was presented at low levels in children with ADHD but without being the causative factor for ADHD. Other publications

It is argued that diets with fatty acids, sugar restricted and free of preservatives reduce the symptoms of ADHD. High levels of omega 3 and omega 6 are reported as an important factor in school proficiency. Food without salicylate improves the hyperactive symptoms. A child diagnosed with ADHD may react negatively to dyes of food. Moreover, the hyperactivity behavior became worse when they consumed sugar. In light of the evidence from this study, zinc and iron regulate the dopamine metabolism involved in ADHD. The deficiency of these minerals is associated with neurologic disorders. With this in mind, megavitamin therapy provides the best environment for the mind of children with hyperactivity (Millichap & Yee, 2012).

Del-Ponte, Anselmia, et al (2019) elaborated in their article on the association between nutritional exposures and ADHD. For the method used a food frequency questionnaire (FFQ) that estimated sugar consumption and the Development and Well-Being Assessment (DAWBA) were applied to mothers to assess ADHD. The results of the research showed that the epidemiology of this neurological disorder is associated with children 6 years old and they consumed higher amounts of sugar.

On the other hand, there is some evidence that artificial food colorants may affect behavior in children, but this effect is not specific to children with ADHD. Although seems that two types of interventions, Few Foods Diets and Fish Oil Supplementation, seem to hold some promises for reducing ADHD symptoms. It is, however, not meant as a long-term treatment. But dietary alternatives in the treatment of ADHD must be studied because the pharmacological treatment is inefficient and may have negative effects (Rytter, Andersen, et al 2014).

It is argued that each vitamin that taken from food has its own important role. For instance vitamin A helps in growth, vitamins B are central in cell metabolism or vitamin E plays a role in neurological functions. To explain the relationship between vitamins concentrations and ADHD diagnosis comes the research of Landaas, Aarsland et al (2016). Several of vitamins analyzed in serum samples from ADHD patients and controls who also reported impulsivity hyperactivity and inattention. Dietary intervention trials showed positive effects in ADHD. Thus, correction of low vitamin levels could be beneficial in treatment of ADHD. Additionally, was examined the patient who consume alcohol and smoking. Smokers and non-smokers have different dietary habits so a lower intake of certain vitamins in smokers and the high consumption of alcohol over time is known to influence vitamin levels and cause vitamin B deficiency.

Lakhan and Vieira (2008) explain that the lack of certain dietary nutrients contributes to mental disorders. Studies have shown that daily supplements of vital nutrients often effectively reduce patients' symptoms because of the neurotransmitters that alleviate depression and other mental disorders. The treatment with nutritional supplements can be appropriate for disorders like ADHD and autism. Despite this, the researchers warn of the danger of consuming high amounts of nutrition such as omega - 3 fatty acids. Numerous studies have shown that up

2 grams of omega-3 fatty acid taken daily is sufficient for decreasing symptoms of several mental health disorders.

2. Diet factors for autism

Questions about whether food can have an impact on health are answered here. Bakthavahalu, Kannan and Qoronfleh (2020) studied the harmful effects of appealing food colors in children with autism. These types of nutrition have neurotoxic chemicals. Artificial food colors can trigger behavioral issues because of the petroleum, formaldehyde, aniline, hydroxides and sulfuric acids that it has. Except for these, food with color contains lead, arsenic and mercury. Many families with autistic children avoid the dyes in their diets because of the correlation they may have with hyperactivity behavior.

Various nutritional approaches have been attempted for the treatment of autism too. They have been created to make improvements in the sensory and behavioral aspects of children with neurological disorders. Improvements in learning processes have been observed when the children hadn't consumed gluten or casein in their food. However, these types of diets are recommended to be controlled by specialists. Diet gluten and casein free is proposed for children with a food allergy or gluten intolerance. Despite the reported effects, an additional nutritional habit is vegetarianism that children can receive all important micronutrients.

The other research that examines the same topic as the above is Lange, Hauser and Reissmann's study (2015) which discusses the role of gluten-free and casein-free diets in autism too. Many parents of kids with autism intervene nutritionally for therapeutic reasons. After this test, the parents reported that their children had significant improvement on the autism spectrum disorder core dimensions such as attention and communication. On the other hand, the scientific basis regarding the efficacy of these diets on autism symptoms is unclear and needs further research on comorbid problems of autism.

A literature review was performed by Buie (2013) related to the gluten-free diet which was adopted as an autism treatment. The relationship between autism and this diet is complicated by historical sources. Children with neurodevelopment problems have been observed that have gastrointestinal problems (GI). The GI is more common in autistic people so they have celiac disease too. The goal of the current study was to evaluate the use of gluten-free diets in patients with autism to determine if this type of diet is useful as a treatment. What emerged from the research is that a nutritional program improves the autism symptoms but it is not capable of treatment. Other factors should be considered such as quality sleep or educational tasks.

The importance of proper nutritional intake for all children is indicated in the data of Hyman's et al study (2014). This applies more to children with autism because of abnormal feeding behaviors. The children with autism spectrum disorders (ASD) consumed significantly fewer vitamins, minerals and phosphorous. Only a few children met the recommended intakes of vitamins, calcium, fiber and potassium. In addition, the kids ages 2 to 5 years old were obese

in contrast to children 5 to 11 that were underweight. Based on these statistics ASD children consume less of certain nutrients from their food. This fact requires nutritional surveillance and attention.

Fujiwara, Morisaki, et al (2016) literature review report is mentioned the association between ASD and environmental factors by focusing on chemical or nutritional exposures such as smoking/tobacco, alcohol, air pollution, pesticides, endocrine-disrupting chemicals, heavy metals, micronutrients, fatty acid and parental obesity too. In summary, many of these exposures are possibly associated with the onset of ASD whereas other traditional risk factors are less likely to be associated with ASD. Moreover many children that are exposed to these chemicals or nutrients may have the risk of developing ASD.

The following investigation by Bhat, Mahalakshmi, et al (2019) summarizes available data from several recent studies on curcumin in various neurological diseases. Curcumin is a molecule that helps in many neurodegenerative diseases because it is easily absorbed by the body. Also, it maintains homeostasis and helps to clearance of toxicity from the brain. ASD is a multi-syndrome disorder affecting brain development and curcumin is considered beneficial for the brain. The major symptoms of ASD include reduced social interest, anxiety and sensory processing disorder manifested as repetitive and stereotypic behavior. At the ASD are secreted toxins too. Curcumin is reported that reduce anti-anxiety activity. It is equally important that curcumin helps the molecular pathways having therapeutic effects on the brain.

Some studies have reported that folic acid could be associated with the incidence of autism. The articles included in the present study addressed topics for intake of vitamins, folic acid, food and nutrition levels. The results of this literature research indicated that children with autism have higher levels of homocysteine in contrast with B12 and folic acid may be diminished in patients with autism. On the other hand, folate levels may be influenced by recent food and this explains the fact that patients fasted before the examination so the findings were likely to be accurate (Castro, Klein, et al, 2014).

Although the causes of autism are almost unknown, evidence points show that there are nutritional deficiencies, exposures to chemicals, allergies, deficiencies in the levels of tryptophan and others. Tryptophan (Trp) is an amino acid and an essential component of the human diet and it plays a crucial role in many metabolic functions. Supplementation with Trp secretes serotonin and melatonin. It is also used in helping to improve cognitive disorders and other diseases. A dysfunctional serotonergic system could be involved with autism. Eventually, a deficiency of Trp in autistic children was observed because of food selectivity, so the autistic behaviors get worse (Kałużna-Czaplińska, Gątarek, et al, 2017).

Food and physical activities play important role in managing of autism people. Diet and nutrition are essential in everyone's life because good nutrients cann remove toxins from the body, make an excellent immune system, curb hunger, and prevent obesity. Children with autism are commonly affected by eating disorders, but parents of such children usually cannot

help control the eating because of the behavioral problems. The neurodevelopmental disorders are comorbid with eating disorders. Food rich in vitamins and minerals acts as antioxidants and improves these children's better functioning. Many diets suggest for these children such as gluten-free diet or carbohydrate-free ketone diet. These types of diet seem to have some effects in opposition to medication (Doreswamy, Bashir et al 2020).

4. Conclusion

Children with autism and ADHD exhibit a range of symptoms with the common features to communication and social interaction, stereotypies, limited interests and behavioral problems. To be able to control these symptoms it is necessary to control the dietary habits too, because of these disorders have been related with nutrient deficiencies and unhealthy diets.

More specifically, the correct intake vitamin levels could be beneficial in treatment of ADHD. Some researchers showed that the consumption of less unhealthy foods and drinks but more healthy foods like vegetables, fruits and fish have positive effects on neurodevelopment disorder. For examples the expose to the chemicals or bad nutrients may have negative effects of developing ASD or ADHD. Moreover, the gastrointestinal problems are common in autistic people so there is another reason for them to follow a specific diet. But except for that, a good nutrition have therapeutic effects on the brain helping to improve cognitive disorders and other diseases.

In summary the findings of this study contribute to the research literature in terms of the health of children with ADHD and ASD too with help of nutrition. Moreover, these may provide baseline data for adopting a good of these children through eating habits. However these findings are not sufficient, so further research is deemed necessary in the future.

Finally we underline the importance of the digital technologies in education domain and especially in health education, that is very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures via Mobiles which brings educational activities everywhere [29-40], various ICTs applications which are the core supporters of health education [41-75], AI, STEM & ROBOTICS which raise educational procedures into new levers of performance [76-88], and games which transforms the education and health training in a very friendly and enjoyable interaction [89-96]. Additionally, the enhancement and combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [97-163] as well as with environmental factors and nutrition [25-28], accelerates and improves more over the educational practices and results, especially in the health domain and its practices like assessment-diagnosis and intervention-rehabilitation.

References

[1] Abid Bhat, A., Mahalakshmi, A. M., Ray, B., Tuladhar, S., Tousif A., Hediyal, T. A., Manthiannem, E., Padamati, J., Chandra, R., Chidambaram, S., B., & Sakharkar, M., K. (2019). Benefits of curcumin in brain disorders. International Union of Biochemistry and Molecular Biology, 1-24, doi: 10.1002/biof.1533

[2] Baird, G., Cass, H., Slonims, V. (2003). Diagnosis of autism. BMJ, 327, 488–493, doi: 10.1136/bmj.327.7413.488

[3] Bakthavachalu, P., Kannan, M., Qoronfleh, W. (2020). Food color and Autism: A Meta-Analysis. Adv Neurobiol, 24, 481-504, doi: 10.1007/978-3-030-30402-7_15

[4] Bartolo, M., C. (2014). Nutrition in childhood. The Journal of the Malta College of Family Doctors, 03, 12-20

[5] Buie, T. (2013). The Relationship of Autism and Gluten. Clinical Therapeutics, 35 (5), 578-583, doi: 10.1016/j.clinthera.2013.04.011

[6] Castro, K., Klein, L., S., Baronio, D., Gottfried, C., Riesgo, R., & Perry, I., S. (2014). Folic acid and autism: What do we know? Nutritional Neuroscience, 0 (0), 1-8, doi 10.1179/1476830514Y.0000000142

[7] Cruchet, S., Lucero, Y., & Cornejo, V. (2016). Truths, Myths and Needs of Special Diets: Attention-Deficit/Hyperactivity Disorder, Autism, Non-Celiac Gluten Sensitivity, and Vegetarianism. Ann Nutr Metab, 68 (1), 43-50, doi: 10.1159/000445393

[8] Del-Pontea, B., Anselmia , L., Assunçãoa, M., C., F., Tovo-Rodriguesa, L., Munhoza, T., N., Matijasevichb, A., Rohdec, L., A., & Santosa, I., S. (2019) Sugar consumption and attention-deficit/hyperactivity disorder (ADHD): A birth cohort study. Journal of Affective Disorders, 243, 290-296, doi: 10.1016/j.jad.2018.09.051

[9] Doreswamy, S., Bashir, A., Guarecuco, E., J., Lahori, S., Baig, A., Narra, L., R., Patel, P., & Heindl, E., S. (2020). Effects of Diet, Nutrition, and Exercise in Children With Autism and Autism Spectrum Disorder: A Literature Review. Cureus, 12 (12), 1-7, doi: 10.7759/cureus.12222

[10] Doulou, K., & Drigas, A. (2022). ADHD: Causes and alternative types of intervention. Scientific Electronic Archives, 15 (2), 49-57, doi: 10.36560/15220221514

[11] Furman L. (2005). What Is Attention-Deficit Hyperactivity Disorder (ADHD)? J Child Neurol, 20 (12), 994-1003

[12] Fujiwara, T., Morisaki, N., Honda, Y., Makiko Sampei, M., & Tani, Y. (2016). Chemicals, Nutrition, and Autism Spectrum Disorder: A Mini-Review. Frontiers in Neuroscience, 10 (174), 1-7. doi: 10.3389/fnins.2016.00174

[13] Granero, R., Pardo-Garrido, A., Carpio-Toro, I., L., Andrés Alexis Ramírez-Coronel, A., A., Martínez-Suárez, P., C., & Reivan-Ortiz, G., G. (2021). The Role of Iron and Zinc in the Treatment of ADHD among Children and Adolescents: A Systematic Review of Randomized Clinical Trials. Nutrients, 13, 1-20. doi: org/10.3390/nu13114059

[14] Hyman, L., S., Stewart, A., P., Schmidt, B., Cain, U., Lemcke, N., Foley, T., J., Peck, R., Clemons, T., Reynolds, A., Johnson, C., Handen, B., James, S., J., Patty Manning Courtney, P., M., Molloy, C., & Philip, K. (2012). Nutrient Intake From Food in Children With Autism. Pediatrics, 130 (145), 145-153, doi: 10.1542/peds.2012-0900L

[15] Kałużna-Czaplińska, J., Gątarek, P., Chirumbolo, S., Max Stanley Chartrand, M., S., & Bjorklund, J. (2017), How important is tryptophan in human health? Critical Reviews in Food Science and Nutrition, 1-55, doi: 10.1080/10408398.2017.1357534

[16] Lakhan, S., E., & Vieira, K., F. (2008). Nutritional therapies for mental disorders. Nutrition Journal, 7 (2), 1-8, doi: 10.1186/1475-2891-7-2

[17] Landaas, T., E., Malmei Aarsland, T., I., Ulvik, A., Halmoy, A., Ueland, P., M., & Haavik, J. (2016). Vitamin levels in adults with ADHD. BJPsych Open, 2, 377–384. doi: 10.1192/bjpo.bp.116.003491

[18] Lange, K., W., Hauser, J., & Reissmann, A. (2015). Gluten-free and casein-free diets in the therapy of autism. Wolters Kluwer Health, 18 (6), 573-575

[19] Millichap, G., J., & Michelle M. Yee, M., M. (2012). The Diet Factor in Attention-Deficit/Hyperactivity Disorder. Pediatrics, 129 (330), 330-337, doi: 10.1542/peds.2011-2199

[20] Muhle, R., Trentacoste, S., Rapin, I. (2010). The Genetics of Autism. Pediatrics, 113, 472-486. doi: 10.1542/peds.113.5.e472

[21] Ríos-Hernández, A., Alda, A., J., Farran-Codina, A., Ferreira-García, E., & Izquierdo-Pulido, M. (2016). The Mediterranean Diet and ADHD in Children and Adolescents. Pediatrics, 139 (2), 2-9, doi: 10.1542/peds.2016-2027

[22] Robberecht, H., Verlaet, A., A., J., Breynaert, A., Bruyne, T., & Hermans, N. (2020). Magnesium, Iron, Zinc, Copper and Selenium Status in Attention-Deficit/Hyperactivity Disorder (ADHD). Molecules, 25 (4440), 2-15, doi:10.3390/molecules25194440

[23] Rytter, M., J., H., Andersen, L., B., B., Houmann, T., Bilenberg, N., Hvolby, A., Molgaard, C., Michaelsen, F., K., & Lauritzen, L. (2015). Diet in the treatment of ADHD in children—A systematic review of the literature. Nordic Journal of Psychiatry, 69 (1), 1-18, doi: 10.3109/08039488.2014.921933

[24] Van De Sande, Marijke M. H., van Buul, Vincent J. & Brouns, Fred J. P. H. (2014). Autism and nutrition: the role of the gut–brain axis. Nutrition Research Reviews, 27, 199–214, doi:10.1017/S0954422414000110

[25] Stavridou Th., Driga, A.M., Drigas, A.S., Blood Markers in Detection of Autism ,International Journal of Recent Contributions from Engineering Science & IT (iJES) 9(2):79-86. 2021.

[26] Zavitsanou, A., & Drigas, A. (2021). Nutrition in mental and physical health. Technium Soc. Sci. J., 23, 67.

[27] Driga, A.M., Drigas, A.S. "Climate Change 101: How Everyday Activities Contribute to the Ever-Growing Issue", International Journal of Recent Contributions from Engineering, Science & IT, vol. 7(1), pp. 22-31, 2019. https://doi.org/10.3991/ijes.v7i1.10031

[28] Driga, A.M., and Drigas, A.S. "ADHD in the Early Years: Pre-Natal and Early Causes and Alternative Ways of Dealing." International Journal of Online and Biomedical Engineering (IJOE), vol. 15, no. 13, 2019, p. 95., doi:10.3991/ijoe.v15i13.11203

[29] AS Drigas, MA Pappas 2015 A review of mobile learning applications for mathematics. International Journal of Interactive Mobile Technologies 9 (3)

[30] Vlachou J. and Drigas, A. S., "Mobile technology for students and adults with Autistic Spectrum Disorders (ASD)," International Journal of Interactive Mobile Technologies, vol. 11(1), pp. 4-17, 2017

[31] Papoutsi C., Drigas, A. S., and C. Skianis, "Mobile Applications to Improve Emotional Intelligence in Autism – A Review," Int. J. Interact. Mob. Technol. (iJIM); Vol 12, No 6, 2018

[32] Karabatzaki, Z., Stathopoulou, A., Kokkalia, G., Dimitriou, E., Loukeri, P., Economou A., & Drigas, A. (2018). Mobile Application Tools for Students in Secondary Education. An Evaluation Study. International Journal of Interactive Mobile Technologies (iJIM), 12(2), 142-161

[33] https://doi.org/10.3991/ijim.v11i4. 6589

[34] Stathopoulou A., Loukeris D., Karabatzaki Z., Politi E., Salapata Y., and Drigas, A. S., "Evaluation of Mobile Apps Effectiveness in Children with Autism Social Training via Digital Social Stories," Int. J. Interact. Mob. Technol. (iJIM); Vol 14, No 03, 2020

[35] Stathopoulou, et all Mobile assessment procedures for mental health and literacy skills in education. International Journal of Interactive Mobile Technologies, 12(3), 21-37, 2018,
[36] Drigas, A., Kokkalia, G. & Lytras, M. D. (2015). Mobile and Multimedia Learning in Preschool Education. J. Mobile Multimedia, 11(1/2), 119–133.
[37] Stathopoulou, A., Karabatzaki, Z., Kokkalia, G., Dimitriou, E., Loukeri, P.I., Economou, A., and Drigas, A. (2018). Mobile assessment procedures for mental health and literacy skills in education. International Journal of Interactive Mobile Technologies (iJIM), 12(3):21-37. https://doi.org/10.3991/ijim.v12i3.8038
[38] Drigas, A.S., Ioannidou, R.E., Kokkalia, G. and Lytras, M. (2014), "ICTs, mobile learning and social media to enhance learning for attention difficulties", Journal of Universal Computer Science, Vol. 20 No. 10, pp. 1499-1510.
[39] G Kokkalia, AS Drigas, A Economou 2016 Mobile learning for preschool education. International Journal of Interactive Mobile Technologies 10 (4)
[40] A Stathopoulou, Z Karabatzaki, D Tsiros, S Katsantoni, A Drigas 2022 Mobile apps the educational solution for autistic students in secondary education International Association of Online Engineering
[41] Drigas, A. S., & Ioannidou, R. E. (2011, September). ICTs in special education: A review. In World Summit on Knowledge Society (pp. 357-364). Springer, Berlin, Heidelberg.
[42] Drigas, A. S., J.Vrettaros, L.Stavrou, D.Kouremenos, E-learning Environment for Deaf people in the E-Commerce and New Technologies Sector, WSEAS Transactions on Information Science and Applications, Issue 5, Volume 1, November 2004.
[43] Drigas, A.S., Vrettaros, J. and Kouremenos, D. (2004a) 'Teleeducation and e-learning services for teaching English as a second language to deaf people, whose first language is the sign language', WSEAS Transactions on Information Science and Applications, Vol. 1, No. 3, pp.834–842.
[44] Drigas, A., Koukianakis, L., Papagerasimou, Y., Towards an ICT-based psychology: Epsychology, Computers in Human Behavior, 2011, 27:1416–1423. https://doi.org/10.1016/j.chb.2010.07.045
[45] Charami, F., & Drigas, A. (2014). ICTs in English Learning and Teaching. International Journal of Engineering and Science. Vol. 2(4):4-10. DOI: 10.3991/ijes.v2i4.4016
[46] Drigas A.S., Kouremenos D (2005) An e-learning system for the deaf people. In: WSEAS transaction on advances in engineering education, vol 2, issue 1, pp 20–24
[47] Drigas A., Pappas M, and Lytras M., "Emerging technologies for ict based education for dyscalculia: Implications for computer engineering education," International Journal of Engineering Education, vol. 32, no. 4, pp. 1604–1610, 2016.
[48] Drigas, A. & Kokkalia, G. 2017. ICTs and Special Education in Kindergarten. International Journal of Emerging Technologies in Learning 9 (4), 35–42.
[49] Drigas A., and Koukianakis L., A Modular Environment for E-learning and E-psychology Applications, WSEAS Transactions on Information Science and Application, Vol. 3, 2004, pp. 2062-2067.
[50] Drigas, A., Leliopoulos, P.: Business to consumer (B2C) e-commerce decade evolution. Int. J. Knowl. Soc. Res. (IJKSR) 4(4), 1–10 (2013)
[51] Pappas M, Drigas A, Papagerasimou Y, Dimitriou H, Katsanou N, Papakonstantinou S, et al. Female Entrepreneurship and Employability in the Digital Era: The Case of Greece. Journal of Open Innovation: Technology, Market, and Complexity. 2018; 4(2): 1.

[52] Papanastasiou G., Drigas, A. S., Skianis Ch., M. Lytras & E. Papanastasiou, "Patient-Centric ICTs based Healthcare for students with learning, physical and/or sensory disabilities," Telemat Inform, vol. 35, no. 4, pp. 654–664, 2018. https://doi. org/10.1016/j.tele.2017.09.002

[53] Drigas, A., & Kontopoulou, M. T. L. (2016). ICTs based Physics Learning. International Journal of Engineering Pedagogy (iJEP), 6(3), 53-59. https://doi.org/10.3991/ijep.v6i3. 5899

[54] Papanastasiou, G., Drigas, A., Skianis, C., and Lytras, M. (2020). Brain computer interface based applications for training and rehabilitation of students with neurodevelopmental disorders. A literature review. Heliyon 6:e04250. doi: 10.1016/j.heliyon.2020.e04250

[55] Drigas, A. S., John Vrettaros, and Dimitris Kouremenos, 2005. "An e-learning management system for the deaf people," AIKED '05: Proceedings of the Fourth WSEAS International Conference on Artificial Intelligence, Knowledge Engineering Data Bases, article number 28.

[56] Pappas, M., Demertzi, E., Papagerasimou, Y., Koukianakis, L., Kouremenos, D., Loukidis, I. and Drigas, A. 2018. E-Learning for deaf adults from a user-centered perspective. Education Sciences 8(206): 3-15.

[57] Marios A. Pappas, Eleftheria Demertzi, Yannis Papagerasimou, Lefteris Koukianakis, Nikitas Voukelatos, and Drigas, A. S., 2019. Cognitive Based E-Learning Design for Older Adults. Social Sciences 8, 1 (Jan. 2019), 6. https://doi.org/10.3390/socsci801000

[58] Drigas, A. S., Leyteris Koukianakis: Government online: An e-government platform to improve public administration operations and services delivery to the citizen. WSKS (1), volume 5736 de Lecture Notes in Computer Science, 523–532. Springer, 2009.

[59] Theodorou, P.; Drigas, A. ICTs and Music in Generic Learning Disabilities. Int. J. Emerg. Technol. Learn. 2017, 12, 101–110

[60] Drigas, A., Kokkalia, G., & Lytras, M. D. (2015). ICT and collaborative co-learning in preschool children who face memory difficulties. Computers in Human Behavior, 51, 645–651. https://doi.org/10.1016/j.chb.2015.01.019

[61] Pappas, M.A., & Drigas, A.S. (2015). ICT based screening tools and etiology of dyscalculia. International Journal of Engineering Pedagogy, 3, 61-66.

[62] Drigas, A., & Kostas, I. (2014). On Line and other ICTs Applications for teaching math in Special Education. International Journal of Recent Contributions from Engineering, Science & IT (iJES), 2(4), pp-46. http://dx.doi.org/10.3991/ijes.v2i4.4204

[63] Alexopoulou, A, Batsou, A, Drigas, A. (2019). Resilience and academic underachievement in gifted students: causes, consequences and strategic methods of prevention and intervention. International Journal of Online and Biomedical Engineering (iJOE), vol. 15, no. 14, pp. 78.

[64] Pappas, M. A., & Drigas, A. S. (2015). ICT Based Screening Tools and Etiology of Dyscalculia. International Journal of Engineering Pedagogy, 5(3)

[65] Drigas, A. & Ioannidou, R. E. (2013). Special education and ICT's. International Journal of Emerging Technologies in Learning 8(2), 41– 47.

[66] Drigas, A., & Papanastasiou, G. (2014). Interactive White Boards in Preschool and Primary Education. International Journal of Online and Biomedical Engineering (iJOE), 10(4), 46–51. https://doi.org/10.3991/ijoe.v10i4.3754

[67] Drigas, A. S. and Politi-Georgousi, S. (2019). Icts as a distinct detection approach for dyslexia screening: A contemporary view. International Journal of Online and Biomedical Engineering (iJOE), 15(13):46–60.

[68] Lizeta N. Bakola, Nikolaos D. Rizos, Drigas, A. S., "ICTs for Emotional and Social Skills Development for Children with ADHD and ASD Co-existence"International Journal of Emerging Technologies in Learning (iJET), https://doi.org/10.3991/ijet.v14i05.9430

[69] Kontostavlou, E.Z., & Drigas, A.S. (2019). The Use of Information and Communications Technology (ICT) in Gifted Students. International Journal of Recent Contributions from Engineering, Science and IT, 7(2), 60-67. doi:10.3991/ijes.v7i2.10815

[70] Drigas, A. S., and Vlachou J. A., "Information and communication technologies (ICTs) and autistic spectrum disorders (ASD)," Int. J. Recent Contrib. Eng. Sci. IT (iJES), vol. 4, no. 1, p. 4, 2016. https://doi.org/10.3991/ijes.v4i1.5352

[71] Drigas, A. S., Koukianakis, L, Papagerasimou, Y. (2006) "An elearning environment for nontraditional students with sight disabilities.", Frontiers in Education Conference, 36th Annual. IEEE, p. 23-27.

[72] Drigas A., and Koukianakis L. An open distance learning e-system to support SMEs e-enterprising. In proceeding of 5th WSEAS Internationalconference on Artificial intelligence, knowledge engineering, data bases (AIKED 2006). Spain

[73] AS Drigas, LG Koukianakis, YV Papagerasimou 2005 A system for e-inclusion for individuals with sight disabilities Wseas transactions on circuits and systems 4 (11), 1776-1780

[74] MT Kontopoulou, V Papageorgiou, E Malli, L Mertsioti, A Drigas 2022 Special education in science teaching Technium Education and Humanities 2 (4), 19-33

[75] A Drigas, A Petrova 2014 ICTs in speech and language therapy. International Journal of Engineering Pedagogy (iJEP) 4 (1), 49-54

[76] Kefalis C and Drigas A. (2019) Web Based and Online Applications in STEM Education. International Journal of Engineering Pedagogy (iJEP) 9, 4 (2019), 76–85.https://doi.org/10.3991/ijep.v9i4.10691

[77] Drigas, A. S., Rodi-Eleni Ioannidou, A Review on Artificial Intelligence in Special Education, Information Systems, Elearning, and Knowledge Management Research Communications in Computer and Information Science Volume 278, pp 385-391, 2013 http://dx.doi.org/10.1007/978-3-642-35879-1_46

[78] Drigas, A., Vrettaros, J.: An Intelligent Tool for Building e-Learning Contend-Material Using Natural Language in Digital Libraries. WSEAS Transactions on Information Science and Applications 5(1) (2004) 1197–1205

[79] Drigas, A.S., Vrettaros, J., Koukianakis, L.G. and Glentzes, J.G. (2005). A Virtual Lab and e-learning system for renewable energy sources. Int. Conf. on Educational Tech.

[80] Drigas AS, Argyri K, Vrettaros J (2009) Decade review (1999-2009): artificial intelligence techniques in student modeling. In: World Summit on Knowledge Society. Springer, pp 552–564

[81] Vrettaros, J., Tagoulis, A., Giannopoulou, N., & Drigas, A. (2009). An empirical study on the use of Web 2.0 by Greek adult instructors in educational procedures. World Summit on Knowledge System (WSKS), 49, 164-170. http://dx.doi.org/10.1007/978-3-642-04757-2_18

[82] Drigas, A., Dourou, A. (2013). A Review on ICTs, E-Learning and Artificial Intelligence for Dyslexic's Assistance. iJet, 8(4), 63-67.

[83] Drigas, A. S., Ioannidou,E.R., (2012), Artificial intelligence in special education: A decade review, International Journal of Engineering Education, vol. 28, no. 6.

[84] Anagnostopoulou, P., Alexandropoulou, V., Lorentzou, G., Lykothanasi, A., Ntaountaki, P., & Drigas, A. (2020). Artificial intelligence in autism assessment. International Journal of Emerging Technologies in Learning, 15(6), 95-107. https://doi.org/10.3991/ijet.v15i06.11231

[85] Pappas, M., & Drigas, A. (2016). Incorporation of artificial intelligence tutoring techniques in mathematics. International Journal of Engineering Pedagogy, 6(4), 12–16. https://doi.org/10.3991/ijep.v6i4.6063
[86] N Lytra, A Drigas 2021STEAM education-metacognition–Specific Learning Disabilities Scientific Electronic Archives 14 (10)
[87] E Mitsea, N Lytra, A Akrivopoulou, A Drigas 2020 Metacognition, Mindfulness and Robots for Autism Inclusion. Int. J. Recent Contributions Eng. Sci. IT 8 (2), 4-20
[88] E Chaidi, C Kefalis, Y Papagerasimou, A Drigas 2021 Educational robotics in Primary Education. A case in Greece. Research, Society and Development 10 (9), e17110916371-e17110916371
[89] I Chaidi, A Drigas 2022 Digital games & special education Technium Social Sciences Journal 34, 214-236
[90] Papanastasiou, G. P., Drigas, A. S., & Skianis, C. (2017). Serious games in preschool and primary education: Benefits and impacts on curriculum course syllabus. International Journal of Emerging Technologies in Learning, 12(1), 44–56. https://doi.org/10.3991/ijet.v12i01.6065
[91] Kokkalia, G., Drigas, A., Economou, A., Roussos, P., & Choli, S. (2017). The use of serious games in preschool education. International Journal of Emerging Technologies in Learning, 12(11), 15-27. https://doi.org/10.3991/ijet.v12i11.6991
[92] Drigas, A. S., and Pappas M.A. "On line and other Game-Based Learning for Mathematics." International Journal of Online Engineering (iJOE) 11.4, 62-67, 2015 https://doi.org/10.3991/ijoe.v11i4.4742
[93] Papanastasiou, G., Drigas, A., Skianis, C., & Lytras, M. D. (2017). Serious games in K-12 education: Benefits and impacts on students with attention, memory and developmental disabilities. Program, 51(4), 424-440. https://doi.org/10.1108/prog-02-2016-0020
[94] Drigas, A. S., & Kokkalia, G. K. (2014). ICTs in Kindergarten. International Journal of Emerging Technologies in Learning, 9(2). https://doi.org/10.3991/ijet.v9i2.3278
[95] A Doulou, A Drigas 2022 Electronic, VR & Augmented Reality Games for Intervention in ADHD Technium Social Sciences Journal
[96] Kokkalia, G., Drigas, A., & Economou, A. (2016). The role of games in special preschool education. International Journal of Emerging Technologies in Learning (iJET), 11(12), 30-35.
[97] Drigas, A., & Mitsea, E. (2020). The 8 Pillars of Metacognition. International Journal of Emerging Technologies in Learning (iJET), 15(21), 162-178. https://doi.org/10.3991/ijet. v15i21.14907
[98] Drigas, A., & Papoutsi, C. (2019). Emotional intelligence as an important asset for HR in organizations: Leaders and employees. International Journal of Advanced Corporate Learning, 12(1). https://doi.org/10.3991/ijac.v12i1.9637
[99] Drigas, A. S., and M. Pappas, "The Consciousness-Intelligence-Knowledge Pyramid: An 8x8 Layer Model," International Journal of Recent Contributions from Engineering, Science & IT (iJES), vol. 5, no.3, pp 14-25, 2017. https://doi.org/10.3991/ijes.v5i3.7680
[100] Mitsea, E., & Drigas, A. (2019). A journey into the metacognitive learning strategies. International Journal of Online & Biomedical Engineering, 15(14). https://doi.org/ 10.3991/ijoe.v15i14.11379
[101] Drigas A, Karyotaki M (2017) Attentional control and other executive functions. Int J Emerg Technol Learn iJET 12(03):219–233
[102] Drigas A, Karyotaki M 2014. Learning Tools and Application for Cognitive Improvement. International Journal of Engineering Pedagogy, 4(3): 71-77. From (Retrieved on 13 May 2016)

[103] Drigas, A., & Mitsea, E. (2021). 8 Pillars X 8 Layers Model of Metacognition: Educational Strategies, Exercises &Trainings. International Journal of Online & Biomedical Engineering, 17(8). https://doi.org/10.3991/ijoe.v17i08.23563

[104] Drigas A., Papoutsi C. (2020). The Need for Emotional Intelligence Training Education in Critical and Stressful Situations: The Case of COVID-19. Int. J. Recent Contrib. Eng. Sci. IT 8 (3), 20–35. 10.3991/ijes.v8i3.17235

[105] Drigas, A., & Mitsea, E. (2020). The Triangle of Spiritual Intelligence, Metacognition and Consciousness. International Journal of Recent Contributions from Engineering, Science & IT (iJES), 8(1), 4-23. https://doi.org/10.3991/ijes.v8i1.12503

[106] Kokkalia, G., Drigas, A. Economou, A., & Roussos, P. (2019). School readiness from kindergarten to primary school. International Journal of Emerging Technologies in Learning, 14(11), 4-18.

[107] Drigas, A., & Mitsea, E. (2021). Metacognition, stress-relaxation balance & related hormones. International Journal of Recent Contributions from Engineering, Science & IT (iJES), 9(1), 4–16. https://doi.org/10.3991/ijes.v9i1.19623

[108] Pappas M, Drigas A. Computerized Training for Neuroplasticity and Cognitive Improvement. International Journal of Engineering Pedagogy. 2019;.(4):50-62

[109] Papoutsi, C. and Drigas, A. (2017) Empathy and Mobile Applications. International Journal of Interactive Mobile Technologies 11. 57. https://doi.org/10.3991/ijim.v11i3.6385

[110] Papoutsi, C. & Drigas, A. (2016). Games for Empathy for Social Impact. International Journal of Engineering Pedagogy 6(4), 36-40.

[111] Karyotaki, M., & Drigas, A. (2015). Online and other ICT Applications for Cognitive Training and Assessment. International Journal of Online and Biomedical Engineering. 11(2), 36-42.

[112] Papoutsi, C., Drigas, A., & Skianis, C. (2019). Emotional intelligence as an important asset for HR in organizations: Attitudes and working variables. International Journal of Advanced Corporate Learning, 12(2), 21–35. https://doi.org/10.3991/ijac.v12i2.9620

[113] Chaidi I. and Drigas, A. S., "Autism, Expression, and Understanding of Emotions: Literature Review," Int. J. Online Biomed. Eng., vol. 16, no. 02, pp. 94–111, 2020. https://doi.org/ 10.3991/ijoe.v16i02.11991

[114] Drigas, A. S., & Karyotaki, M. (2019). A Layered Model of Human Consciousness. International Journal of Recent Contributions from Engineering, Science & IT (iJES), 7(3), 41- 50. https://doi.org/10.3991/ijes.v7i3.11117

[115] Drigas, A. S., Karyotaki, M., & Skianis, C. (2018). An Integrated Approach to Neuro-development, Neuroplasticity and Cognitive Improvement. International Journal of Recent Contributions from Engineering, Science & IT (iJES), 6(3), 4-18.

[116] Karyotaki M. and Drigas, A. S., "Latest trends in problem solving assessment," International Journal of Recent contributions from Engineering, Science & IT (iJES), vol. 4, no. 2, 2016. [Online serial]. Available: https://online-journals.org/index.php/i-jes/article/view/5800/. [Accessed Aug. 21, 2019]. https://doi.org/10.3991/ijes.v4i2.5800

[117] Mitsea E., Drigas, A. S., and Mantas P., "Soft Skills & Metacognition as Inclusion Amplifiers in the 21st Century," Int. J. Online Biomed. Eng. IJOE, vol. 17, no. 04, Art. no. 04, Apr. 2021. https://doi.org/10.3991/ijoe.v17i04.20567

[118] Angelopoulou, E. Drigas, A. (2021). Working Memory, Attention and their Relationship: A theoretical Overview. Research. Society and Development,10(5), 1-8. https://doi.org/10.33448/rsd-v10i5.15288

[119] Tourimpampa, A., Drigas, A., Economou, A., & Roussos, P. (2018). Perception and text comprehension. It'sa matter of perception! International Journal of Emerging Technologies in Learning (iJET). Retrieved from https://online-journals.org/index.php/ijet/article/view/7909/5051
[120] A Drigas, E Mitsea 2020 A metacognition based 8 pillars mindfulness model and training strategies. International Journal of Recent Contributions from Engineering, Science & IT …
[121] C Papoutsi, A Drigas, C Skianis 2021 Virtual and augmented reality for developing emotional intelligence skills Int. J. Recent Contrib. Eng. Sci. IT (IJES) 9 (3), 35-53
[122] S Kapsi, S Katsantoni, A Drigas 2020 The Role of Sleep and Impact on Brain and Learning. Int. J. Recent Contributions Eng. Sci. IT 8 (3), 59-68
[123] A Drigas, E Mitsea, C Skianis 2021 The Role of Clinical Hypnosis and VR in Special Education International Journal of Recent Contributions from Engineering Science & IT …
[124] V Galitskaya, A Drigas 2021 The importance of working memory in children with Dyscalculia and Ageometria Scientific Electronic Archives 14 (10)
[125] I Chaidi, A Drigas 2020 Parents' Involvement in the Education of their Children with Autism: Related Research and its Results International Journal Of Emerging Technologies In Learning (Ijet) 15 (14 …
[126] A Drigas, E Mitsea 2021 Neuro-Linguistic Programming & VR via the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences Technium Soc. Sci. J. 26, 159
[127] A Drigas, E Mitsea 2022 Conscious Breathing: a Powerful Tool for Physical & Neuropsychological Regulation. The role of Mobile Apps Technium Social Sciences Journal
[128] A Drigas, E Mitsea, C Skianis 2022 Clinical Hypnosis & VR, Subconscious Restructuring-Brain Rewiring & the Entanglement with the 8 Pillars of Metacognition X 8 Layers of Consciousness X 8 Intelligences. International Journal of Online & Biomedical Engineering 18 (1)
[129] A Drigas, M Karyotaki 2019 Attention and its Role: Theories and Models. International Journal of Emerging Technologies in Learning 14 (12), 169-182
[130] A Drigas, M Karyotaki 2019 Executive Functioning and Problem Solving: A Bidirectional Relation. International Journal of Engineering Pedagogy (iJEP) 9 (3)
[131] V Bamicha, A Drigas 2022 ToM & ASD: The interconnection of Theory of Mind with the social-emotional, cognitive development of children with Autism Spectrum Disorder. The use of ICTs as an alternative … Technium Social Sciences Journal 33, 42-72
[132] A Drigas, E Mitsea, C Skianis 2022 Neuro-Linguistic Programming, Positive Psychology & VR in Special Education. Scientific Electronic Archives 15 (1)
[133] V Bamicha, A Drigas 2022 The Evolutionary Course of Theory of Mind - Factors that facilitate or inhibit its operation & the role of ICTs. Technium Social Sciences Journal 30, 138-158
[134] I Chaidi, A Drigas 2022 Emotional intelligence and autism spectrum disorder. Technium Social Sciences Journal 35 (1), 126–151
[135] I Chaidi, A Drigas 2022 Emotional intelligence and learning, and the role of ICTs. Technium Social Sciences Journal 35 (1), 56–78
[136] C Papoutsi, A Drigas, C Skianis 2022 Serious Games for Emotional Intelligence's Skills Development for Inner Balance and Quality of Life-A Literature Review. Retos: nuevas tendencias en educación física, deporte y recreación 46, 199-208
[137] I Chaidi, A Drigas 2022 Social and Emotional Skills of children with ASD: Assessment with Emotional Comprehension Test (TEC) in a Greek context and the role of ICTs. Technium Social Sciences Journal 33, 146-163

[138] A Drigas, E Mitsea, C Skianis Intermittent Oxygen Fasting and Digital Technologies: from Antistress and Hormones Regulation to Wellbeing, Bliss and Higher Mental States BioChemMed 3 (2), 55-73
[139] A Sideraki, A Drigas Artificial Intelligence (AI) in Autism Technium Social Sciences Journal 26, 262-277
[140] E Mitsea, A Drigas, C Skianis Cutting-Edge Technologies in Breathwork for Learning Disabilities in Special Education Technium Social Sciences Journal 34, 136-157
[141] A Drigas, E Mitsea, C Skianis Subliminal Training Techniques for Cognitive, Emotional and Behavioural Balance. The role of Emerging Technologies Technium Social Sciences Journal 33, 164-186
[142] A Stathopoulou, M Liouni, Y Salapata, A Drigas 2022 Emotional difficulties and post-traumatic stress disorder symptoms in children refugees & the role of ICTs: A case study in northern Greece borders Technium Social Sciences Journal 31, 213-227
[143] V Bravou, AM Driga, A Drigas 2022 Emotion Regulation, the Function of Stress Hormones & Digital Technologies BioChemMed 3 (2), 27-34
[144] C Gatsakou, N Bardis, A Drigas 2022 The Theatre of Mind: An educational tool of teaching Emotional Intelligence via ICTs and distant learning Technium Social Sciences Journal 31, 241-255
[145] I Chaidi, C Papoutsi, A Drigas, C Skianis 2022 Women: E-Entrepreneurship and Emotional Intelligence Technium Social Sciences Journal 30, 214-237
[146] E Angelopoulou, A Drigas 2022 Working memory interventions via physical activity and ICTs: A strategic issue for the improvement of school students' learning performance Technium Social Sciences Journal 30, 200-213
[147] M Zografou, A Drigas 2022 The role of executive functions and ICTs in anxiety management of children with learning disabilities Scientific Electronic Archives 15 (8), 22-28
[148] E Angelopoulou, Z Karabatzaki, A Drigas 2021 Assessing working memory in general education students for ADHD detection Research, Society and Development 10 (10), e138101018766-e138101018766
[149] T Vouglanis, AM Driga, A Drigas 2022 Charismatic Children: Heredity, Environment and ICTs Technium Sustainability 2 (5), 1-15
[150] A Drigas, MT Kontopoulou, A Gougoudi, K Kantzavelou, L Mertzioti 2022 The education of Gifted in Special Education domain and the role of ICTs Technium Education and Humanities Drigas 2 (4), 1-18
[151] A Drigas, MT Kontopoulou, A Gougoudi, K Kantzavelou, L Mertzioti 2022 Assessing and Recognizing Gifted Children using ICTs Technium Education and Humanities 2 (4), 78-96
[152] E Batziaka, D Galanopoulou, I Papadogiannis, M Papapetrou, A Drigas 2022 ADHD and Giftedness and the role of ICTs Technium Education and Humanities 2 (4), 34-50
[153] A Drigas, MT Kontopoulou, A Gougoudi, K Kantzavelou, L Mertzioti 2022 Educating Gifted Students and the role of ICTs and STEM Technium Sustainability 2 (4), 63-79
[154] V Galitskaya, M Batzaka, E Kasapoglou, A Drigas 2022 Giftedness: A Three Way Approach and the role of ICTs Technium Social Sciences Journal 30, 238-251
[155] E Mitsea, A Drigas, C Skianis 2022 Mindfulness for Anxiety Management and Happiness: The Role of VR, Metacognition, and Hormones Technium BioChemMed 3 (3), 37-52
[156] A Drigas, E Mitsea, C Skianis 2022 Virtual Reality and Metacognition for Learning Disabilities Encyclopedia: Where Brilliant Minds Gather

[157] E Mitsea, A Drigas, C Skianis 2022 Mindfulness Strategies for Metacognitive Skills Training in Special Education: The Role of Virtual Reality Technium Social Sciences Journal 35 (1), 232–262
[158] A Sideraki, A Drigas 2022 Comparative analysis on: Metacognition and Mindfulness in twins with Attachment and children with ASD through I.C.T. Technium Social Sciences Journal 34, 90-109
[159] A Sideraki, A Drigas 2022 Comparative analysis on: Metacognition and Mindfulness in twins with Attachment and children with ASD through I.C.T. Technium Social Sciences Journal 34, 90-109
[160] P Chatzivasileiou, A Drigas 2022 ICTs for the Cognitive and Metacognitive abilities of the students with Specific Learning Disorder in Mathematics Technium Social Sciences Journal 31, 256-279
[161] P Chatzivasileiou, A Drigas 2022 ICTs for the Development of the Cognitive and Metacognitive abilities of the students with Specific Learning Disorder in Mathematics Technium Social Sciences Journal, 256-279
[162] P Chatzivasileiou, A Drigas 2022 ICTs for the Assessment of the Cognitive and Metacognitive abilities of the students with Specific Learning Disorder in Mathematics Technium Social Sciences Journal 31, 131-152
[163] B Victoria, A Drigas 2022 ToM & ASD: The Interconnection of Theory of Mind with the Social-Emotional, Cognitive Development of Children with Autism Spectrum Disorder. The Use of ICTs as an Alternative … Technium Soc. Sci. J. 33, 42