SOCIAL DIFFICULTIES OF LEARNING, ATTENTIONAL AND AUTISTIC SPECTRUM DISORDER: DSM-5
EDITION
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Lenses to Treat Dyslexia?

"In recent months, articles have surfaced claiming that ChromaGen colored lenses have been FDA approved for the treatment of Dyslexia. While the lenses have been approved to aid in the treatment of visual problems, they have not been approved to treat Dyslexia".

Penczek, K.L. (August, 2013). False Claims Mislead About Dyslexia Treatment. http://www.interdys.org/ResponseToColoredLensClaim.htm.

"...Dyslexia is no more frequent in these children with significant eye-movement disorders than in the general population. 137 Problems such as nystagmus interfere with foveal fixation time, yet affected children have not shown an increased likelihood of dyslexia. Thus, dyslexia is not the result of oculomotor deficits but, rather, the result of more central processing problems..."

"...If it is present, symptoms can include discomfort or blurry or moving vision. Findings of accommodative insufficiency may include decreased visual acuity at near, a remote monocular near point, accommodative lag, and either esophoria or exophoria. Decreased accommodation has been associated with uncorrected high hyperopia, nonspecific viral illness, local ocular trauma, many medications, and functional problems. 138 There is no proof that there is a difference in accommodative ability between normal and abnormal readers. 111 Difficulties in accommodation do not interfere with decoding but can interfere with the child's ability to concentrate on print for a prolonged period of time..."

"...Convergence amplitudes have not been correlated with reading comprehension...Several studies have investigated the connection between reading ability and the binocular and accommodative status of unselected children. No causal relationship was found between normal variants and reading/writing difficulties. 113 Manifest strabismus, known as tropias (eg, esotropia and exotropia), also has not been associated with dyslexia..."

"...In summary, vision problems can interfere with the process of reading; however, vision problems are not the cause of dyslexia. Significant refractive errors can make reading more difficult. Convergence insufficiency and poor accommodation, both of which are uncommon in children, can interfere with the physical act of reading but not with decoding and word recognition..."

"... Thus, treatment of these disorders can make reading more comfortable and may allow reading for longer periods of time but does not directly improve decoding or comprehension.²⁹ If reading impairment is attributable solely to a visual problem, improvement in school performance should be observed once the problem is corrected. 153 Other than the need for long-term optical correction, these problems generally do not require extended treatment programs".

Reference

Handler, S.M., and Fierson, W.M. (March 1, 2011). Learning Disabilities, Dyslexia, and Vision. Pediatrics, 127(3), pp. e818 -e856 (doi: 10.1542/peds.2010-3670).

AD/HD Adolescents and Medication

"Results demonstrated that adolescents with ADHD did not reliably discern active medication from placebo, rarely attributed their performance to the pill, and showed no differences in attributional style as a function of medication status. Conclusion: These data indicate that adolescents with ADHD may possess inaccurate beliefs about the effect of stimulant medication on their behavior".

Reference

Pelham, W.E et al. (July 26, 2013). Attributions and Perception of Methylphenidate Effects in Adolescents With ADHD. <u>Journal of Attention Disorders</u>. DOI: 10.1177/1087054713493320.

Learning, Memory and Aerobic Fitness

"We interpret these novel data to suggest that fitness can boost learning and memory of children and that these fitness-associated performance benefits are largest in conditions in which initial learning is the most challenging. Such data have important implications for both educational practice and policy".

Raine, L.B. et al. (September 11, 2013). The Influence of Childhood Aerobic Fitness on Learning and Memory. <u>PLoS ONE</u>, <u>8(9)</u>: e72666. doi:10.1371/journal.pone.0072666

Prospagnosia and Oxytocin Spray

"This study provides the first evidence that oxytocin may be used to temporarily improve face recognition in people with either developmental or acquired prosopagnosia. The effects of the hormone are thought to last 2-3 hours, and it may be that the nasal spray can be used to improve face recognition on a special occasion. However, much more research needs to be carried out, as we don't currently know whether there are benefits or risks associated with longer-term inhalation of the hormone."

Reference

Bate, S., and Bennetts, R. (September 3, 2013).

Nasal Inhalation of Oxytocin Improves Face
Blindness. <u>Alpha Galileo Foundation</u>. <u>British</u>

<u>Psychological Society</u>. From website:

http://www.alphagalileo.org/ViewItem.aspx

?ItemId=134086&CultureCode=en.