MATH DIFFICULTIES: REASONS AND REMEDIES

December 6, 2016 Nancy Knop, Ph.D., <u>www.summitcenter.us</u>

SELECTED REFERENCES

- •Beilock SL et al.,. 2010. Female teachers' math anxiety affects girls' math achievement. Proc. Natl. Acad. Sci USA 108(5):1860-3. See other work from the Bielock lab, University of Chcago
- •Berkowitz T et al., 2015. Math at home adds up to achievement at school. Science, 350 (6257) 196-198
- •Dehaene S, et al. (2003). Three parietal circuits for number processing. Cog. Neuropsychol., 20, 487–506.
- Fair DA et al., 2008. **The maturing architecture of the brain's default network**. *Proc Natl Acad Sci U S A*. 11:105(10); 4028-4032
- •Gogtay N et al., 2004. **Dynamic mapping of human cortical development during childhood through early adulthood**. Proc Natl Acad Sci USA 2004 May 25; 101(21): 8174-179
- •Goldin-Meadow, Susan, 2003, **Hearing Gesture: How Our Hands Help Us Think**, Belknap Press of Harvard University Press. See other work from the Goldin-Meadow lab, University of Chicago
- •Johnson, et al., 2001. **Developing conceptual understanding and procedural skill in mathematics: an interative process**. J. Ed Psychol. 93(2):346-362. From the Siegler lab, Carnegie Mellon
- •Mattarella-Micke A et al., 2011. Choke or thrive? The relation between salivary cortisol and math performance depends on individual differences in working memory and math-anxiety. Emotion. 11(4):1000-10005.
- •Rosenberg-Lee M, 2011. What difference does a year of schooling make?: Maturation of brain response and connectivity between 2nd and 3rd grades during arithmetic problem solving. Neuroimage 57(3):796-808. From the Menon lab at Stanford.
- •Rykhlevskala, Uddin, Kondos and Menon, 2009. Neuroanatomical correlates of developmental dyscalculia: combined evidence from morphometry and tractography. Frontiers in Neuroscience. doi: 10.3389/neuro.09.051.2009
- •Willcutt EG et al., 2013. Comorbidity between reading disability and math disability: Concurrent psychopathology, functional impairment, and neuropsychological functioning. J Learn Disabil. Nov-Dec; 46(6): 500–516.

- \bullet Whitney D, 2009. Vision: Seeing Through Gaps in the Crowd. Curr Biol . 19(23): R1075–R1076. d
- •Zorzi, et al., 2012. Extra-large letter spacing improves reading in dyslexia. Proc. Nat. Acad Sci. USA. 109(28):11455-9.