

## References and Abstracts (Where Possible) for Foothills Academy Research (as of August 2023)

Alexander, D. W. (1986). *Learning disabled adolescents and their families: Reciprocal relationships between self-concept and family functioning* (Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

Alston, C. Y. (1990). *Depression, attributional style and self-esteem in attention-deficit hyperactivity disorder male* (Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

Colp, S. M. (2012). *Examining the Effectiveness of an Orthographic-Based Intervention for Children with Reading Disabilities*. (Unpublished thesis). University of Calgary, Calgary, Canada.

Conte, R., Kinsbourne, M., Swanson, J., Zirk, H., & Samuels, M. (1986). Presentation rate effects on paired associate learning by attention deficit disorder children. *Child Development*, 57(3) 681- 687.

2 methods of varying presentation rate during paired associate learning were contrasted in attention deficit disorder (ADD) children. Previous studies have varied presentation rate across different (fixed rate) lists, and they have demonstrated that ADD children perform poorly at slower rates. In the present study, this method of presentation was contrasted with one in which half the items within a single list were presented at a fast rate and half at a slow rate. The debilitating effect of the slow rate was obtained in ADD children (but not in normal controls) only with the fixed list method. This finding suggests that the rate effects occur in ADD children because they are vulnerable to the experimental context created when items are presented at a slow rate over an extended time period.

Coombs, C. (2006). *Mood, physical illness, and gender differences in dyslexic adolescents* (Unpublished honours thesis). Mount Allison University, Sackville, Canada.

The purpose of this study was to determine if rates of depressive symptomology are higher in dyslexic than non-dyslexic adolescents, and to examine gender differences, the prevalence of immune/autoimmune disorders, and possible influences of prenatal testosterone levels in these groups. Two depression inventories, an immune/autoimmune disorders questionnaire, and a 2D:4D digit ratio were administered to 60 dyslexic and 20 non-dyslexic participants. No significant differences in depression scores were found, nor were rates of depression by gender. Prenatal testosterone levels were higher in dyslexic women than in non-dyslexic women, with the dyslexic women exhibiting typical male 2D:4D ratios. Future research is required on the contribution of environmental factors to depression in dyslexic adolescents, and on the role of prenatal testosterone in the development of dyslexia.

Crawford, S. G. (1990). *The relationships among nonrighthandedness, immune disorders and developmental learning difficulties* (Unpublished master's thesis). University of Calgary, Calgary, Canada.

Feurer, D. P., & Andrews, J. J. W. (2009). School-related stress and depression in adolescents with and without learning disabilities: an exploratory study. *Alberta Journal of Educational Research*, 55(1) 92-108.

This study examined school-related stress and depression in adolescents with and without learning disabilities. A total of 87 students (38 learning-disabled and 49 nondisabled) from secondary schools in Calgary completed questionnaires on depressive symptoms and on school-related stress. Results indicated that the adolescents with LD reported significantly higher levels of academic self-concept stress than their NonLD peers. However, the groups did not differ significantly on depression or on the other areas of school-related stress. Significant and positive correlations between school-related stress and depression were found, and the stress variables were found to be significant predictors of adolescent depression. Practical implications of the findings for parents and educators are discussed.

Gallagher, B. A. (2004). *Transitional skills programs and conceptual framework for a new program at Foothills Academy*. Unpublished manuscript.

Gallucci, A. T., McCoy, L. K., & Nicholson, A. T. (2015). "What works?": A program evaluation of social skills training for children experiencing ADHD and/or LD. Unpublished manuscript, University of Calgary, Calgary, Canada

Kaplan, B. J., Fisher, J. E., Crawford, S. G., Field, C. J., & Kolb, B. (2004). Improved mood and behavior during treatment with a mineral-vitamin supplement: an open-label case series of children. *Journal of Child and Adolescent Psychopharmacology*, 14(1), 115-122.

Several studies have demonstrated that psychiatric symptoms such as depression, mood swings, and aggression may be ameliorated by supplementation with broad-based nutrient formulas containing vitamins, minerals, and sometimes essential fatty acids. These findings have been reported in young criminal offenders as well as in adults with mood disturbance and other psychiatric disorders. The purpose of the current case series was to explore the potential efficacy of a nutrient supplement in children. Children with mood and behavioral problems (N = 11; 7 boys, 4 girls; 8–15 years old) participated; 9 completed this open-label trial. Parents completed the Child Behavior Checklist (CBCL), Youth Outcome Questionnaire (YOQ), and Young Mania Rating Scale (YMRS) at entry and following at least 8 weeks of treatment. Intent-to-treat analyses revealed decreases on the YOQ ( $p < 0.001$ ) and the YMRS ( $p < 0.01$ ) from baseline to final visit. For the 9 completers, improvement was significant on seven of the eight CBCL scales, the YOQ, and the YMRS ( $p$  values from 0.05–0.001). Effect sizes for all outcome measures were relatively large. The findings suggest that formal clinical trials of broad nutritional supplementation are warranted in children with these psychiatric symptoms.

Kooistra, L., & Crawford, S. (2010). An efficacy evaluation of the Read/Write reading remediation program at the Foothills Academy Community Services. Unpublished manuscript, University of Calgary, Calgary, Canada.

Kooistra, L., Crawford, S., Gibbard, B., Ramage, B., & Kaplan, B. J. (2010). Differentiating attention deficits in children with fetal alcohol spectrum disorder or attention-deficit-hyperactivity disorder. *Developmental Medicine & Child Neurology*, 52(2), 205-211.

The attention and inhibition problems found in children with attention-deficit-hyperactivity disorder (ADHD) are also common in children with fetal alcohol spectrum disorders (FASDs). Attempts to distinguish ADHD from FASDs in terms of these deficits are rare and were pursued in this study. A total of 116 children (47 with

ADHD, 31 males, 16 females; 30 with FASDs, 17 males, 13 females; and 39 comparison children, 20 males, 19 females) participated. The mean age was 9 years 4 months (SD 1y 8mo) in the ADHD groups, 8 years 10 months (SD 1y 2mo) in the FASD group, and 9 years 1 month (SD 1y 1mo) in the comparison group. Sustained attention was tested with a slow event rate continuous performance task (CPT). Inhibitory control was tested with both a slow and fast event rate Go/No-Go task. On the CPT task, children with 745 – 37 Street NW Calgary, AB T2N 4T1 T: 403.270.9400 F: 403.270.9438 www.foothillsacademy.org info@foothillsacademy.org BN 11892 7060 RR0001 Foothills Academy School \* Estelle Siebens Community Services ADHD, combined type (ADHD-C), ADHD, primarily inattentive type (ADHD-PI), and FASDs showed greater declines in task performance as a function of time than comparison children, suggesting sustained attention problems in all clinical groups. Children's Go/No-Go performance was event-rate dependent, with the ADHD-C group being affected in the slow condition and the ADHD-PI and FASD groups having problems with the fast condition. Children with ADHD-C are typically impaired in handling understimulation, while children with FASDs may have problems with overstimulation. The dissociation in responsivity to event rate between groups may have significant differential diagnostic value.

Kooistra, L., van der Meere, J. J., Edwards, J. D., Kaplan, B. J., Crawford, S., & Goodyear, B. G. (2010). Preliminary fMRI findings on the effects of event rate in adults with ADHD. *Journal of Neural Transmission*, 117(5), 655-662.

Abstract Inhibition problems in attention deficit hyperactivity disorder (ADHD) are sensitive to stimulus event rate. This pilot study explores the neural basis of this increased susceptibility to event rate in ADHD. Event related functional magnetic resonance imaging was used in conjunction with the administration of a fast (1.5 s) and a slow (7 s) Go/No-Go task. Brain activity patterns and reaction times of ten young male adults with ADHD (two of whom were in partial remission) and ten healthy male controls were compared. The ADHD group responded slower than controls with greater variability but with similar number of errors. Accurate response inhibition in the ADHD group in the slow condition was associated with widespread frontostriatal activation, including the thalamus. For correct Go trials only, the ADHD group compared with controls showed substantial under-activation in the slow condition. The observed abnormal brain activation in the slow condition in adults with ADHD supports a frontostriatal etiology, and underlines a presumed activation regulation deficit. Larger sample sizes.

Lester, C., Premji, F., Kovitz, B. & Balsden, K. (2014). *GLOW Program Evaluation* Unpublished manuscript, University of Calgary, Calgary, Canada.

Malloy-Miller, T. (1985). *An examination of handwriting problem subtypes* (Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

McNichol, K. (1999). *Social skill production, emotional intensity and anxiety in attention deficit disordered and learning disabled children* (Master's thesis). Retrieved from

<http://prism.ucalgary.ca/bitstream/1880/42630/1/49646McNichol.pdf>

This study explored the experience of affect intensity, anxiety and social strategy generation to a structured Social Knowledge Interview within a sample of Attention Deficit Hyperactivity Disordered (ADHD) and Learning Disabled (LD) children. From a pool of 28, nine to sixteen-year-old students, 15 ADHD and 13 LD only diagnosed subjects were identified. The subjects completed the Revised Children's Manifest Anxiety Scale, Affect Intensity Measure and participated in an interview asking them to provide social strategies to 16 illustrated problematic social interactions. ADHD children suggested social strategies at a rate equal to, and that were judged as friendly and as relationship enhancing as their LD peers. The two groups did not differ in their

anxiety or affect intensity scores. Results are discussed in the context of needing to subtype the heterogeneous LD population in order to facilitate more accurate descriptions of social skill deficits.

Neprily, K. (2020). [Summer camp for adolescents with Attention-Deficit/Hyperactivity Disorder: A naturalistic context for enhancing social competence.](#) (Unpublished thesis). University of Calgary, Calgary, Canada.

Many adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD) experience difficulties in social competence (Ros & Graziano, 2018). Social difficulties in adolescents with ADHD have been tied to poor long-term outcomes and are predictive of global impairment (Morris et al., 2020). Summer camp programs have been overlooked as an opportunity for social growth and development. Evidence suggests that specialized summer camp with social skills training may have positive outcomes on social competence development in adolescents with ADHD (Pelham et al., 2010; Sibley et al., 2011, 2012). The current study investigated changes in social competence of adolescents with ADHD within a specialized social skills summer camp for children and adolescents with ADHD. The present study included a sample of 60 adolescents with ADHD between the ages of 12 and 16 years old and 15 camp counsellors. The Social Emotional Assets and Resiliency Scales-Adolescent (SEARS-A) and Parent (SEARS-P) report were used to measure social competence. Overall, the present study demonstrated that adolescents with ADHD have significantly lower social competence when compared to a normative sample of adolescents. The study also confirmed that adolescents with ADHD improve their social competence after attending a specialized summer camp as demonstrated by higher social competence scores at the end of camp. Finally, the current study found similar scores between counsellor ratings of adolescent's social competence and adolescent ratings of social competence. In conclusion, specialized summer camp programs may be an innovative, cost effective and generalizable method to support social competence growth in adolescents with ADHD.

Neprily, K & Climie, E. (2022). *Happy Campers: Enhancing Social Competence in Adolescents with ADHD at Summer Camp.* Journal of Outdoor Recreation, Education, & Leadership, 1-15.

Many adolescents with attention-deficit/hyperactivity disorder (ADHD) experience challenges in social competence. Evidence suggests that specialized summer camps with social skills training may have positive outcomes on social competence development in adolescents with ADHD. This article reports on a pilot study of a therapeutic summer camp program for children and adolescents with ADHD. The study examines the degree to which program objectives were achieved through a pre-camp, post-camp design using a series of standardized instruments, camp evaluations, and surveys with parents. The results indicated that the campers initially reported significantly lower social competence when compared to a normative sample of adolescents before the camp but improved their social competence by the end of camp. This research has implications for researchers, caregivers, and outdoor education advocates to take an assertive lead in promoting evidence-based psychosocial programs for youth with and without ADHD into more generalizable community settings.

Ogden, N. A. (1994). *Overt and covert visual orienting in the learning disabled child* (Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

Paul, M. (1981). *A comparison of reading achievement among four types of dyslexic adolescents* (Unpublished master's thesis). University of Calgary, Calgary, Canada.

Rumpel, B.J., (1996). *Teaching self-esteem and classroom competence: An ethnomethodological perspective* (Doctoral dissertation). Retrieved from <http://www.collectionscanada.gc.ca/obj/s4/f2/dsk3/ftp04/nq20768.pdf>

From an ethnomethodological perspective, the structure of the classroom is viewed as the product of the socially organized activities of the members interacting to accomplish the specific task at hand. In this study,

routine classroom lessons and practices are located and analysed for ways in which the social structure of what counts as self-esteem is exhibited. The discussion begins with the suggestion that the self-esteem of children with learning disabilities and attention disorders should be examined using an alternative perspective to the use of correlational studies and diagnostic assessments and other related procedures. The 'objective reality of social facts' such as competence, participation, academic success and other skill based and behavioural elements of the self-attitudes that are labelled in the conventional literature as self-esteem, are viewed as an ongoing accomplishment in the affairs of the classroom rather than as social facts in and of themselves. This research views student self-esteem as inextricably linked to the linguistic practices used in the everyday routine of the classroom. Chapter Four demonstrates that the elements of what counts in the classroom as self-esteem are made visible within and as a consequence of that structure. What counts as self-esteem in the classroom is both an instructional topic and resource in this classroom. The primary mechanism or structural element used in the instruction of the elements of self-esteem and classroom competence in this classroom is the judicious and intentional exercise of the asymmetrical rights and privileges of the teacher. The constitutive elements of self-esteem are not only visible as instructional content, but in the moral organization of the classroom, and learning and attention disabilities have remained and been maintained and organized through the structure of the classroom and lessons as background features. They are features of the interaction which we all know and take for granted and do not have to be spoken about in-so-many-words. Self-esteem in the academic setting is both a production and function of the specific organizational structures used commonly in classrooms and as such, it is within the ability of those structures to produce competent members in the academic community. The evidence detailed in this study demonstrates that the constitutive elements of what counts as self-esteem for all practical purposes in the classroom is teachable within the routine lesson structures in the classroom. Further, this study demonstrates that through the intentional organization of teacher authority, learning disabilities and attention deficits need not be remarkable within the classroom.

Toll, K. (2014). *The role of speech recognition technology in fostering cognitive engagement in students* (Master's thesis). Retrieved from [http://theses.ucalgary.ca/bitstream/11023/1911/2/ucalgary\\_2014\\_Kendal\\_Toll.pdf](http://theses.ucalgary.ca/bitstream/11023/1911/2/ucalgary_2014_Kendal_Toll.pdf)

Speech recognition technology, which allows for the conversion of speech to text, is commonly used with individuals who struggle with writing due to cognitive, physical, or sensory issues. While there is initial support for the positive impact of speech recognition technology on specific writing outcomes (e.g., skilled writing), limited attention has been given to examining the cognitive mechanisms by which it exerts influence. One possible avenue to consider is the link between speech recognition technology and student cognitive engagement, defined as an investment in the work of learning. With evidence to suggest that certain technology use increases student engagement (e.g., interactive whiteboards, writing pads), it is possible that the use of speech recognition technology helps students to become more cognitively invested in their writing. Findings from this case study identify: (a) the extent to which students utilizing speech recognition technology are cognitively engaged in their writing; (b) necessary conditions to elicit cognitive engagement; and (c) the impact of speech recognition technology on student writing. Comparison is made between students identified as engaged and non-engaged in the writing task, with examination given to possible differences in the learning environments and student and teacher perceptions toward the use of speech recognition technology. This study provides insight into important factors to consider when using speech recognition technology in order to maximize the impact of this technology on student learning.

Waldie, K. (1998). *Hemispheric specialization for reading in subtypes of children with developmental dyslexia*

(Unpublished doctoral dissertation). University of Calgary, Calgary, Canada.

Although the human brain acts as an integrated whole, each of the two cerebral hemispheres is thought to have an advantage for the processing of certain types of information. For individuals with severe reading disabilities (developmental dyslexia), previous evidence indicates that dyslexics may not display the usual anatomical and functional cerebral asymmetries. However, the findings have been equivocal because researchers have generally failed to take into account distinct subtypes of dyslexia, thereby obscuring differences that may exist between particular subgroups by averaging performance. The purpose of the dissertation research was to investigate hemispheric specialization for reading in children unable to process and decode phonological information (dysphonetic dyslexia), in children who are unable to process and decode words holistically (dyseidetic), and in children with both types of impairments (mixed dyslexia) as reflected by performance on tasks requiring the manual discrimination of visually presented single nouns and nonwords lateralized lexical decision task and the processing of narrative material during speeded finger tapping (dual-task procedure). Both paradigms take advantage of the fact that distal finger movements are controlled by the contralateral cerebral hemisphere. The lateralized lexical decision task was employed to examine two models for the hemispheric processing of linguistic stimuli: "Direct access" (the difference in the relative processing of linguistic stimuli: "Direct access" (the difference in the relative processing efficiencies between the two hemispheres, each processing the stimuli presented directly to it) and "callosal relay" (callosal transfer of the stimulus when projected to the nonspecialized hemisphere). The dual-task procedure consisted of oral and silent reading during speeded finger tapping. earlier work has indicated that for individuals with normal language asymmetry, reading will interfere with right hand tapping performance more than left hand performance. Conversely, patients whose language is supported by the right hemisphere generally show greater left hand than right hand tapping interference during concurrent reading.