## A new mediatised measure of phonological awareness in French Pierre Cormier, Madeleine Léger, Jonathan Cormier and Marie-Ève Daigle Université de Moncton

Please note the data collection for this project is under way at the time this proposal is submitted.

One of the key difficulties of developmental dyslexics is their processing of phonological information as assessed by measures of phonological awareness (Melby-Lervåg, Lyster, & Hulme, 2012; Peterson & Pennington, 2015). The Test d'Analyse Auditive en Français (TAAF hereafter; Cormier, Grandmaison, MacDonald, & Lebel-Ouellet, 1995) is a measure of phonological awareness in French that can be used to identify dyslexics. It has not been updated since its development. The current project is an update and an extension of the TAAF through its mediatisation. Mediatising this test is part of a trend to get tests into a presentation mode more appealing to younger generations (Bernhardt, Rivera, & Kamil, 2004) and to make them more accessible to school personnel and private clinicians.

Like the auditory analysis test (Rosner & Simon, 1971) that inspired it, the TAAF is a phonological deletion task of either one of two phonological units, syllables and phonemes, from a familiar word. On any single trial, a deletion task requires the omission of a particular sound from the stimulus word and the production of all what is left (e.g.: "take away the sound /ba/ from "cabanon"." for a syllable trial and "take away the /t/ sound from "orteille"." for a phoneme trial). New features in the mediatised version of the TAAF include systematic variation of target location of the phonological unit to be deleted. Syllable deletion occurs either at the beginning or end of a two syllable word or in the middle of a three syllable word. Phoneme deletion involves either the first or last sound of a CVC word, the first or second member of a double consonant blend at the beginning of a CCV word, or a phoneme in the middle of a word. Each type of deletion is presented within a block of 2 practice trials (with feedback) and 10 experimental trials (as suggested by Chafouleas & Martens, 2002). The current project examines how these different sets of phonological deletion impact performance.

Another new development in the mediatised TAAF is the measure of latency times as suggested by Sprenger-Charolles, Colé, Béchennec and Kipffer-Piquard (2005). In a pilot study (Corbin, 2014), seven grades 3 and 5 dyslexics were slower at responding to the TAAF items than fifteen typical readers, yielding a difference of similar size to those found with accuracy scores (Melby-Lervåg et al., 2012), a difference we expect to replicate.

To reproduce the findings of the original version of the TAAF (Cormier et al. 1995), the mediatised version would need to have as strong psychometric properties (internal consistencies (Cronbach's alpha) ranging from ,68 to ,93), as strong a gradual increment in performance across grades, F (6, 280) = 78,12, p < ,001, and as strong correlations with word decoding and spelling (r's above ,75)

that would withstand control by IQ and other measures of the development of oral language ( $\Delta R^{2}$ 's > ,02).

## References

- Bernhardt, E. B., Rivera, R. J., et Kamil, M. L. (2004). The practicality and efficiency of Web-based placement testing for college-level programs. *Foreign Language Annals*, *37*, 356-366.
- Cormier, P., Grandmaison., É, MacDonald, G., et Ouellette-Lebel, D. (1995). Développement d'un test d'analyse auditive en français: normes et validation du construit. *Revue des Sciences de l'Éducation*, *21*, 223-240.
- Melby-Lervåg, M., Lyster, S., et Hulme, C. (2012). Phonological skills and their role in learning to read: A meta-analytic review. *Psychological Bulletin*, 138, 322-352.
- Peterson, R. L., & Pennington, B. F. (2015). Developmental dyslexia. *Annual Review of Clinical Psychology*, 11, 283-307.
- Rosner, J., et Simon, D. (1971). The auditory analysis test: An initial report. *Journal of Learning Disabilities*, *4*, 40-48.
- Sprenger-Charolles, L., Colé, P., Béchennec, D., & Kipffer-Piquard, A. (2005).
  Données normatives pour la fin de la 1re, 2nde, 3e et 4e année du primaire issues d'une nouvelle batterie de tests, EVALEC. *Revue Européenne De Psychologie Appliquée*, 55, 157-186.