**Has your child had a diagnosis of auditory processing disorder, or central auditory processing disorder?** Want to know exactly what it is or what you should do about it? **Or why this is seen as a contentious diagnosis? Read on....**

Caroline Bowen is a very well-respected Speech and language Pathologist, and Professor Pam Snow heads up the SOLAR Lab at LaTrobe University. These two have examined an enormous amount of research on this topic, and if you haven't read their book, **"Making Sense of Interventions for Children with Developmental Disorders: A Guide for Parents and Professionals,**" I can highly recommend it.

In this book, they very carefully describe language & hearing processes and how the term central auditory processing disorder, or now what is called just auditory processing disorder, has come about. **They clearly state that "APD Is a contested and debated diagnosis.** It does not have a place alongside established clinical entities such as ADHD and childhood language disorders in major diagnostic frameworks such as the DSM-V. Its clinical features, the most appropriate diagnostic tests for its identification and measurement, and even it's very existence as a useful, standalone clinical entity remain controversial and troubling.

While authors of "parent information" on some websites, such as Additude and Hearing.com.au, attempt to differentiate related disorders, we think site visitors will feel more or less confused after consulting them." They go on further to describe 21st-century attempts to achieve a common understanding of APD, but it seems they just made things worse.

They describe a messy state of affairs surrounding APD difficulties, and if asking how do receptive language deficits, ADHD, and APD differ? Bowen and Snow will answer, it " May depend on who you ask".

They state, **"Audiologists as a group are probably more likely to refer to APD, while speech and language therapist as a group or tend to prefer language disorder**; however, there is no clear-cut distinction.

Educational and developmental psychologists are likely to bring in the ADHD dimension, teachers may refer to behaviour and/or reading difficulties, and of course all practitioners will be on the alert features of ASD."

**Bowen & Snow also offer a solution to the question, what can the parent of a child who is diagnosed with an auditory processing disorder do?** And they state;

**We cannot go past Richard's conclusion that,** "Despite more than 50 years of research and clinical practice, definitive diagnosis and treatment have not emerged from evidence-based systematic reviews." The inadequate research base in APD suggests that we should stop using the term and evaluate parameters of language performance that are deficient" (2011,p.300)

This position echoes the conclusions of a review by Frey et al. (2011), and was more recently affirmed by the authors of a 2016 systematic review (de Wit et al., 2016), **who concluded that the listening difficulties observed in children diagnosed with APD may reflect underlying cognitive, language, and/or attention problems rather than being accounted for by discrete auditory processing deficit.**

As to the question of what to do instead of APD computer-based training, we leave the final word in this chapter to Dr Allan Cami a professor at the University of North Carolina, cited on page 207, who provided the following sensible, plain language synthesis of the current state of play around a P Ds and their management for practicing speech and language pathologist. We think parents and teachers can also take much away from this.

**Do not assume that a child who has been diagnosed with APD needs to be treated any differently than children who have been diagnosed with language and learning disabilities;**

**Do not provide auditory intervention for a child who has been diagnosed with APD**. Our systematic review found no evidence that auditory interventions provide any unique benefit to auditory, language, or academic outcomes. **Language interventions are just as effective as auditory interventions in improving a child's auditory abilities.**

**Perform a comprehensive assessment of the child's speech, language, and literacy abilities just as you would do with any other student who was referred for an evaluation;** (CELF - A **C**omprehensive **E**valuation of **L**anguage **F**unction) this is performed by a Speech Language Therapist.

Consider non-auditory reasons for listening and comprehension difficulties, such as **limitations in working memory, attention, motivation, language and conceptual knowledge, and influencing abilities;**

**Target speech, language, literacy, and knowledge-based goals in therapy;**

Avoid goals that target processing skills like auditory discrimination, auditory sequencing, follow logical memory, working memory, or rapid serial naming. There is no compelling evidence that targeting the skills significantly improves a child's language or reading ability;

Recognise that acquiring the language, conceptual knowledge, and reasoning skills necessary to talk, understand, read, write, and reason well is challenging, even for typical learners. Learning the skills will, therefore, be particularly challenging for students with language and learning disabilities;

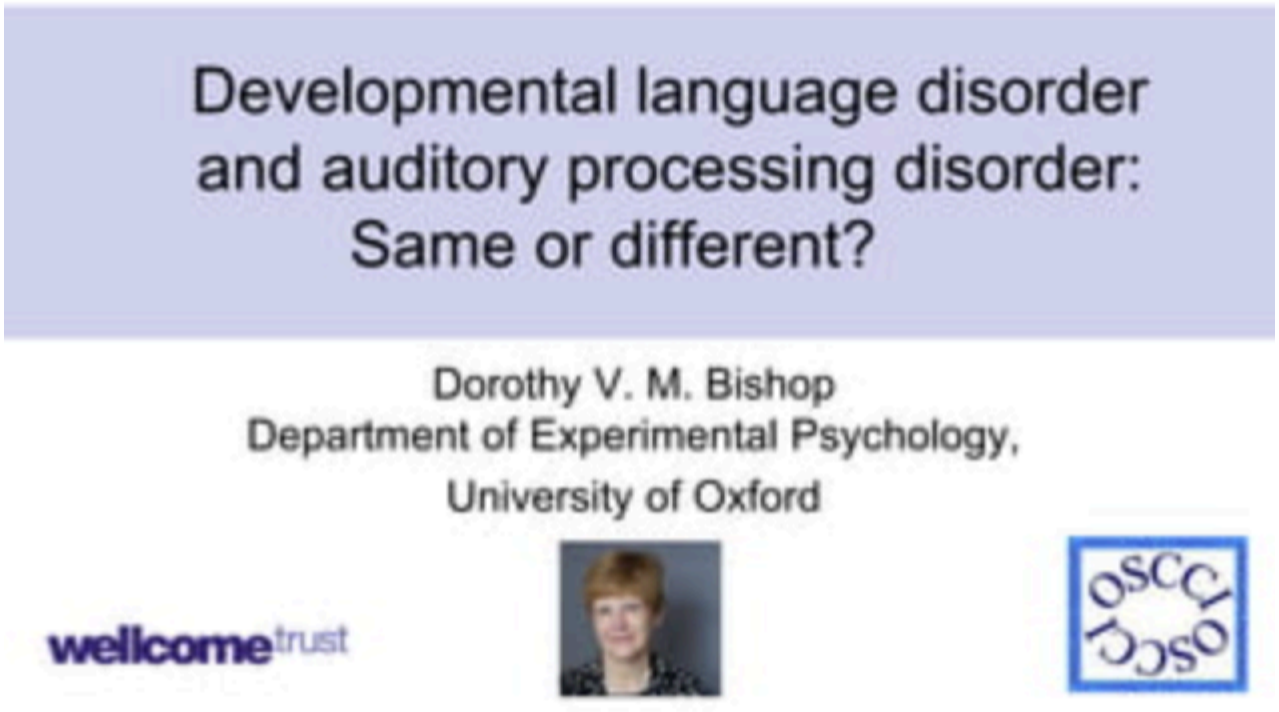
**Keep searching for more effective and efficient ways to improve children's language and reading abilities,** but be wary of interventions that promise quick fixes;

**Most important of all: devote most of your time and effort to teaching students the knowledge and skills that will help them talk, understand, read, write, and reason better.**

We could not have said it any better ourselves. (Bowen and Snow 2017, p.215-217)

https://www.naplic.org.uk/resource/developmental-language-disorder-and-auditory-processing-disorder/

https://www.slideshare.net/slideshow/embed_code/key/aGaOTbXH600ey



# Overview of talk

Using my own research to illustrate some key points about overlaps between APD, DLD, dyslexia

- Studies comparing those with different diagnoses
  - Children diagnosed with APD often have language problems
  - Children diagnosed with DLD/dyslexia often have auditory problems
- Can we devise auditory processing measures that aren't affected by language measures?
  - No! Even passive electrophysiological measures can be influenced by language
- Can we confirm that auditory deficit has *causal* role?
  - Causal models suggest apparent APD can be *consequence* of language disorder
  - No good evidence that auditory interventions benefit language



# Part 1

Evidence that the same child may have features of APD, DLD, dyslexia, ADHD or autism spectrum disorder

Specific diagnosis may depend on who they see