

Don't wait-and-see, research suggests

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Historically, intervening with the group of children known as "late talkers" has been the source of some debate within the field of speech language pathology (Hawa & Spanoudis, 2014). Late talkers are children who:

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- are between 18 20 months and have fewer than 10 words; OR
- are between 21 24 months and have fewer than 25 words; OR
- are between 24 30 months and have fewer than 50 words and/or no two-word combinations; AND
- have no major areas of concern in other areas of development (e.g. understanding, play, social, motor, cognitive skills)

(Rescorla, Mirak, & Singh, 2000)

While some researchers and professionals have advocated early intervention in order to prevent future difficulties, others have adopted a wait-and-see approach, whereby a child is not referred for intervention, despite failing a language screening (Capone Singleton, 2018). The wait-and-see approach is based on the idea that this group of children is likely to catch up to their peers on their own.

However, two recent articles by Capone Singleton (2018) and Hawa et al. (2014) remind us of the body of research which strongly suggests that the wait-and-see approach is outdated, and that an ounce of prevention may be worth a pound of cure when it comes to late talkers.

Late talker, late bloomer, language disorder – what's the difference?

It's important to sort out some terminology before we go any further:

• "Late talkers" are children with early language delay despite typical cognition, sensory and motor systems, and the absence of genetic or neurologic disease. Late talking is a not a diagnostic category; it's a situation which may or may not result in a language disorder.

- "Late bloomers" are late talkers who appear to catch up, as they achieve average scores on language performance as they approach school-age, according to standardized language tests.
- "Language disorder" is a diagnostic category in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (American Psychiatric Association, 2013), and refers to children who have difficulty acquiring and using language that is not attributed to sensory, motor, genetic, cognitive, or other factors. Children with language disorder may or may not have a history of late talking.

(Capone Singleton, 2018; Hawa & Spanoudis, 2014)

Two paths for late talkers

Late talkers generally follow one of two paths:

- they continue to have clear, observable problems with language acquisition and eventually receive a
 diagnosis of language disorder. According to Capone Singleton (2018), at least one in five late talkers will
 persist with a language disorder into elementary school.
- they follow the **late bloomer** path, where they appear to catch up. Between 70-80% of late talking two year olds develop appropriate language skills in later years (Hawa et al., 2014). However, even though they seem to catch up, late bloomers often evidence language weaknesses through adolescence:
 - "...adolescents at 17 years of age, who were identified as late talkers in early childhood, in spite of the fact that they scored within the average range on all language and reading tasks, had a significantly lower performance of vocabulary, grammar, and verbal memory tasks than typically developing peers" (Hawa et al., 2014, p. 405).

Late bloomers also evidence weakness in:

- Language and literacy skills such as phonology, reading, narratives, writing fluency, and listening comprehension
- Other domains that rely on language abilities such as executive function tasks, emotional and behavioural regulation, and social skills
- Speech processing while typically developing 3 to 5 year olds demonstrate a higher proportion of event-related potential responses to speech in the frontal neural region, late bloomers do not. This means that late bloomers have immature speech processing during a very sensitive period in early language development, when continued progress with language and literacy learning hinges on speech processing.

(Hawa et al., 2014; Capone Singleton, 2018)

Therefore, while a cursory glance suggests that late bloomers catch up to their peers, they continue to demonstrate a "weaker endowment for language and related abilities" (Capone Singleton, 2018).

The thinking behind the "wait-and-see" approach

There are several reasons underlying the wait-and-see approach. These are described below, followed by ideas that challenge them (Capone Singleton, 2018; Hawa et al., 2014):

→ There's a perception that late talking is largely a self-correcting situation

Because the majority of late talking children fall into the late bloomer category, and they eventually obtain low average scores on global standardized language testing, there's a perception that these children catch up and do well without intervention. Capone Singleton (2018) suggests that there is a gap between what we know about late talkers' outcomes and their referral for further evaluation or intervention.

Why we shouldn't wait...

As indicated above, most late blooming children continue to evidence weaker language and related abilities. Early language intervention can boost children's long-term outcomes, and also have an impact on other domains that rely on prior language achievements for their development (Capone Singleton, 2018).

→ There's concern about fear of harm a perception that late talking is largely a selfcorrecting situation

These "harms" include the extra time, effort, and anxiety associated with further testing and/or diagnostic labelling. Caregiver stress has been reported in the late-talking literature. In fact, one study revealed that the incidence of parental stress was two to three times higher among parents of late-talking children than parents of typically developing children (Hawa et al.,2014). High levels of stress can negatively affect the parent-child relationship.

Why we shouldn't wait...

We can reduce some of parents' stress by intervening early. For example, the Target Word™ Program is designed specifically for children who are late talkers or late bloomers. When parents join together in a group setting, they feel support and encouragement from meeting other parents in a similar situation. By learning ways to interact with their child and improve their child's communication, this often helps decrease parents' stress as they feel empowered by new strategies and encouraged by their child's progress.

→ There exists great variability in children's language performance and what is considered "normal" when they are infants and toddlers

For example, according to the MacArthur Bates Communicative Development Inventories (Fenson, Marchman, Thal, Dale, Reznick, & Bates, 2007), a 24 month old boy's vocabulary can range anywhere from 63 – 633 words and still be considered within normal limits (Capone Singleton, 2018). This can make it difficult to determine which children are more likely to have persistent language difficulties.

Why we shouldn't wait...

We can circumvent this challenge by adopting a risk factor model. Research conducted over the past two decades has identified risks factors and predictors of change that can be used to evaluate the likelihood of a persistent language delay (Hawa et al., 2014).

A risk factor model for late talking toddlers

Several risk factors have been identified that put a toddler at increased risk for persistent difficulties with language acquisition, including:

- quiet as an infant; limited babbling
- family history of speech, language, learning or academic difficulties
- history of ear infections
- parent variables (i.e., socioeconomic status, interaction style)
- limited consonant repertoire
- limited sequenced pretend play

- · mild delay in comprehension skills
- lack of, or reduced use of, representational gestures
- lack of verbal imitation
- expressive vocabulary consisting of mostly nouns with few or no verbs
- poor social skills
- limited change in expressive language skills over time

Children who are positive for risk factors should be considered for intervention (Earle, 2015). Other findings pertaining to risk factors include the following (Capone Singleton, 2018; Hawa et al., 2014):

- While several risk factors for predicting persistent language problems have been identified, no single reliable predictor has been found
- The language outcomes of late talkers with delays in both production and comprehension are different from late talkers who only have an expressive delay. Children with delays in expression and comprehension are at greater risk for clinically significant language impairments.
- Children with a positive family history of language impairments run twice the risk of being late talkers, and are more likely to experience continuing language difficulties, compared to children without a family history.
- Toddlers are more likely to persist with a language delay the older they are identified. Research shows that 50-70% of late talking 24 month olds seem to "catch up", while 82% of toddlers who failed language screenings at 30 month had persistent language problems at age 6.

Hawa et al. (2014) explain that their literature review supports a risk factor model, in which the greater number of factors present, especially if they are present from early on, the greater the risk of persistent language delay. Furthermore, they suggest that the presence of more risk factors indicates a greater need for clinical intervention.

Intervening with late talkers

Both Capone Singleton (2018) and Hawa et al. (2014) suggest that intervention for late talkers should be based on the social interaction model, and in particular, they mention the Hanen approach and parent-implemented intervention. Hawa et al. (2014) note that "there is conclusive evidence that the Hanen program combined with focused stimulation improves speech and language outcomes from birth to three years of age" (p. 405).

Why parent-implemented intervention?

These authors support the use of parent-implemented intervention which encourages responsive interactions for late talkers for several reasons:

- Parents' language and interaction with late talking toddlers differs from that of parents of typically developing toddlers (Hawa et al., 2014). While the quantity of talk is the same, the difference lies in the quality of communicative interactions. Parents of late talkers respond less often to their children, initiate conversation more, and introduce or change topics more often than other parents. While this likely happens as these parents are trying to encourage their child to talk, it means that parents of late talking children are less likely to follow their child's lead (Hawa et al., 2014). Parents of late talkers have also been noted to produce less self-directed speech (not verbalizing their thoughts as they interact with their child). All of these observations imply that the impact of late talking can be far-reaching and influence the linguistic input to which a child is exposed (Girolametto, Weitzman, Wiigs, & Pearce, 1999).
- Late talking children may have difficulties with social interaction skills, which can influence how they interact with their parents. Capone Singleton (2018) notes that late talkers have been described as serious, withdrawn, and less socially competent. They've also been observed to depend on adults for initiating and responding in conversations, even when compared to younger children matched for vocabulary size. Hawa et al. (2014) report that late talkers are less likely to ask for help and they seem less alert or

interested in playing compared to their typically developing peers. Because of these deficits in social engagement, parents of late talking children adjust their interaction style by becoming more directive (Capone Singleton, 2018).

 Parent-implemented intervention maximizes protective factors against late talking (Capone Singleton, 2018). Protective factors have been identified which may be amenable to change with intervention. Two of these factors are informal play activities and shared book reading between caregivers and children, both of which are used during parent-implemented intervention such as the Target Word™ program.

Hawa et al. (2014) describe the interaction between late talking toddlers and their parents as an "inadequate feedback loop" which exacerbates the child's language difficulties (p. 404). However, by helping parents learn strategies to communicate and interact more effectively with their child, this feedback loop can be altered. When parents learn to follow their child's lead and encourage more child initiations, they can then provide responsive feedback. As Capone Singleton (2018) explains, "A parent-implemented intervention balances the interaction style in the caregiver-child dyad…and shows greater effect sizes in expressive vocabulary growth when compared with other treatments" (p. 23).

Abandoning the wait-and-see approach

Considering the literature available to us about the late talker profile and outcomes, we should feel confident when referring late talking toddlers who evidence risk factors for a short-term intensive intervention such as the Target Word™ program. Capone Singleton (2018) assures us that:

"New directions in brain and behavioral sciences, and the availability of large population samples...endorse referral for further evaluation, but not a wait-and-see approach, when it comes to children who are late to talk" (p. 24)

She also suggests that early intervention may impact other domains that rely on language for their development, and could "...result in long-term, positive outcomes for the child" (p. 24).

Hawa et al. (2014) echo this suggestion, explaining that "early identification and decision making for intervention are both essential and crucial for late talking children" and that "the more [risk] factors are present, the more the risk for persistent language impairments and the need for clinical interventions" (p. 406).

By intervening with the Target Word™ program, we can empower families to help their late talking toddlers and change the developmental trajectory for this group of children. Two recent studies of families who participated in Target Word™ reported not only significant changes in the children's communication, but also a high level of parent satisfaction (Annibale, 2015; Kwok & Earle, 2018). For more information about recent research on the program, please see the Target Word™ Research Summary. You might also be interested in our other articles about late talking toddlers:

- Predicting persistent language difficulties: Which risk factors matter?
- Late Talker: What does the term really mean?
- Do Late Talkers Really "Grow out of it?" Results of a large-scale study

We also have articles about late talkers geared towards the general public that can be distributed to parents:

- How to Tell if Your Child is a Late Talker And What to Do about It
- Closer Look at the Late Talker Study: Why Parents Should Beware of a 'Wait and See' Approach

Check back next week for 2 more articles on late-talkers that you can share with parents: *Do late talkers* "grow out of it"? and *Late talkers...what we know and what we don't.*

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About The Hanen Centre

Founded in 1975, The Hanen Centre is a Canadian not-for-profit charitable organization with a global reach. Its mission is to provide parents, caregivers, early childhood educators and speech-language pathologists with the knowledge and training they need to help young children develop the best possible language, social and literacy skills. This includes children who have or are at risk for language delays, those with developmental challenges such as autism, and those who are developing typically.

For more information, please visit www.hanen.org.

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