Language Development and its Impact on Children's Psychosocial and Emotional Development

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Topic
Language development and literacy

Introduction
Normal speech and language development is a cornerstone for successful outcomes later in life. Speech and language competency does not progress normally for a sizeable number of children, however, and research shows that these children are at greater risk for later psychosocial problems than children who do not have speech or language impairments.

Studies have produced compelling evidence that the psychosocial outcomes of language-impaired children are disproportionately problematic. These outcomes include speech and language competence, intellectual and executive functioning, educational adjustment and achievement, and psychiatric disorder. Key insights from these studies highlighted in this fact sheet imply a need for early identification of language problems and effective intervention.

Subject
Impaired language development in childhood increases the risk for concurrent and later problem behaviour. There is strong evidence for the association between speech and language impairments and psychiatric disorders.[1,2,3] Children with speech and language impairments have increased rates of concurrent attention-deficit hyperactivity disorder and anxiety disorders[4,5,6] and psychiatric disorders at age 12.[7] Cognitive deficits characterize attention-deficit hyperactivity disorder or its subgroups.[8,9,10] There is an association between deficient verbal skills and juvenile delinquency.[11] Children with auditory comprehension and pervasive language problems at age five were more likely to experience concurrent and early adolescent behavioural problems than children with speech impairments alone or children with normal language development.[5]

A history of early language impairment is consistently associated with poor academic performance.[12,13] Clinically referred speech- and language-impaired children have poorer academic performance than children in the general population[14,15,16] and prospective, non-clinical studies reveal similar conclusions.[7,17,18,19,20]

Speech and language impairment may be a precursor to substance use and abuse. It is hypothesized that difficulty in self-regulation underlies substance-use disorders and that language impairment is a facet of executive dysfunction.[21,22] Consequently, language impairment may impede the use of language as the intermediary to evaluate the consequences for an action and it may reduce available alternative strategies for any given action. Some data show that children with speech and language problems have a greater risk of substance-use disorders than their non-impaired peers,[23] but support for this link is not uniform.

Problems

The natural history of speech and language impairments is incomplete. First, many samples utilized for studying speech and language impairments have been clinic-referred, not community-based.[1,24] Referred individuals typify only the most severely impaired persons, not the entire spectrum of speech and language impairments and not the general population. Second, there are no published reports about the persistence of impairments in non-referred samples beyond adolescence, into adulthood. Third, most studies of speech and language impairments are one-time studies without follow-up. These designs are ill suited to drawing strong causal inferences. Other studies have not employed a control group of non-impaired subjects matched to language-impaired subjects. These studies are retrospective and have had difficulty securing objective data on the language history of the control subjects. Fourth, studies of substance-use disorders have posited learning disorders or academic achievement as proposed precursors to outcomes. This is problematic because low academic achievement may be a result of truancy and absenteeism and is not necessarily due to a learning disorder. Fifth, available studies seldom include measurement of outcomes across multiple domains of functioning. This is a crucial shortcoming because problems in other domains of psychosocial function may persist even if speech and language difficulties resolve.

Research Context

The Ottawa Language Study (OLS) is well positioned to investigate psychosocial outcomes and language development. The OLS took a one-in-three random sample of all five-year-old English-speaking children in the Ottawa-Carleton region of Ontario, Canada in 1982. The children were administered a speech and language screening procedure by qualified speech pathologists. The procedure resulted in a sample of 142 speech- and language-impaired children. A control sample of 142 children matched for age and sex and taken from the same classroom or school as the language-impaired children was recruited simultaneously. Both samples completed surveys or assessments of cognitive, developmental, emotional, behavioural and psychiatric functioning. Three follow-up studies of original OLS participants were undertaken when participants were approximately ages 12, 19 and 25.

Key Research Questions

Some of the key questions posed by the OLS have been: Are language impairments associated with behavioural problems, both concurrently and over time? Do outcomes vary as a function of type of language impairment? Do language groups differ in later

academic achievement? Are childhood language impairments associated with greater frequency of psychiatric disorders, particularly substance-use disorders?

Recent Research Results

In the OLS, young adults (age 19) with childhood language impairments had significantly elevated rates of anxiety disorder compared with control subjects, and rates of antisocial personality disorder among males that were almost three times higher.[25] Rates of substance-use disorder in young adulthood were not higher among speech- and language-impaired children and neither were rates of affective disorders. Children with language impairments at age five were about eight times more likely to have age-19 learning disabilities than children without language impairments.[13] Children with poor comprehension at age five showed increased hyperactivity and externalizing behaviour at age 12; they also showed lower social competence at age 12 compared with others – that is, less successful interaction outside the home involving non-family members.[7]

Conclusions

A major OLS finding is that outcomes for children with history of a language impairment are distinctly more negative than outcomes for speech-impaired-only children and non-impaired children. Language-impaired children showed prominent concurrent and long-term deficits in the language, cognitive and academic domains relative to peers without early language difficulties.[26] This was particularly evident with respect to anxiety disorders and antisocial personality disorders among boys. Early language impairment rather than speech impairment (or no impairment) is associated with academic difficulties into young adulthood. Children identified as language-impaired at age five lagged well behind their age-19, non-language-impaired peers on educational achievement, and this finding cannot be explained by language-impaired youths having had lower intellectual ability well before age 19.[13]

Rates of substance-use disorder among young adults with a childhood history of speech and language impairments do not appear to be higher than others. In fact, rates of substance-use disorders may be higher among non-language-impaired children with childhood conduct problems than among speech- and language-impaired children.[27] It has been suggested that the language impairment of these children insulates them from social situations that would facilitate higher substance use. However, children with speech and language impairments are at increased risk for learning disabilities, and children with persistent learning disabilities (at ages 12 and 19) have a higher risk of substance-use disorders.[28]

Implications for the Policy and Services Perspective

Children with language impairments have relatively poor long-term outcomes. They are more likely to have anxiety disorders in young adulthood; anxiety disorders have a negative impact on the quality of life of affected adults[29] and substantial economic and health-care costs.[30] Furthermore, early childhood language impairments are stable across time[26] and their impact can be observed from childhood into young adulthood. Recent research supports the efficacy of early language intervention.[31] Speech and language

professionals should make strong efforts to educate the public and other professionals on the potential importance of early language intervention.[26]

Children with a history of speech and language impairment are more likely to have multiple problems than their non-impaired counterparts. They have a higher rate of co-occurrence of two or more psychiatric disorders (comorbidity) and lower overall functioning. They may benefit most from an early intervention. This points out the urgency for early identification of language impairments and the development and maintenance of proven treatment programs that take into account the multiplicity of adversity faced by these at-risk children.[25]

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