

Introduction: Motor Speech Disorders in Idiopathic Speech Delay and in Complex Neurodevelopmental Disorders: Introduction

Lawrence D. Shriberg

Intellectual and Developmental Disabilities Research Center, Waisman Center, University of Wisconsin-Madison, Madison, Wisconsin, USA

ABSTRACT

This introduction to a special issue of *Clinical Linguistics & Phonetics* includes an overview of the contents of each of the six articles. Each of the articles use the finalized version of the Speech Disorders Classification System (SDCS).

ARTICLE HISTORY

Received 24 January 2019
Revised 12 March 2019
Accepted 12 March 2019

KEYWORDS

apraxia; dysarthria; speech motor delay; speech sound disorders

This issue of *Clinical Linguistics & Phonetics* reports findings from research studies of motor speech disorders in speakers with idiopathic Speech Delay (SD) and in speakers with complex neurodevelopmental disorders. The conceptual and methodological framework for each of the six articles is the finalized version of the Speech Disorders Classification System (SDCS) described in the first article of this series. The SDCS posits pathways from causal constructs to speech assessment for four classifications of motor speech disorders: Speech Motor Delay, Childhood Dysarthria, Childhood Apraxia of Speech, and concurrent Childhood Dysarthria and Childhood Apraxia of Speech. A Supplement to this research series provides detailed information on SDCS classification methods [[Supplementary Data](#)].

Prevalence estimates

The first two articles use SDCS classification measures to obtain initial estimates of the prevalence of motor speech disorders concurrent with idiopathic SD and in speakers with complex neurodevelopmental disorders.


Shriberg, L. D., Kwiatkowski, J., & Mabie, H. L. (2019). *Estimates of the prevalence of motor speech disorders in children with idiopathic speech delay*. *Clinical Linguistics & Phonetics*.

Shriberg, L. D., Strand, E. A., Jakielski, K. J., & Mabie, H. L. (2019). *Estimates of the prevalence of speech and motor speech disorders in persons with complex neurodevelopmental disorders*. *Clinical Linguistics & Phonetics*.

Speech motor delay

The second two articles use the SDCS framework to describe findings from initial studies of the phenotype, persistence, and a frequent acoustic sign of Speech Motor Delay. Speech

CONTACT Lawrence D. Shriberg  shriberg@waisman.wisc.edu  Waisman Center, University of Wisconsin-Madison, Room 439, 1500 Highland Ave, Madison, Wisconsin 53705, USA

 Supplemental data for this article can be accessed on the [publisher's website](#)

© 2019 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Motor Delay was previously studied using the provisional classification term, Motor Speech Disorder-Not Otherwise Specified.

Shriberg, L. D., Campbell, T. F., Mable H. L., & McGlothlin, J. H. (2019). *Initial studies of the phenotype and persistence of Speech Motor Delay (SMD)*. *Clinical Linguistics & Phonetics*.

Shriberg, L. D., & Wren, Y. E. (2019). *A frequent acoustic sign of Speech Motor Delay (SMD)*. *Clinical Linguistics & Phonetics*.

Down syndrome

The last two articles illustrate research and clinical applications of the SDCS framework to assess, classify, and treat speech and motor speech disorders, focusing on prevalence and intelligibility questions in persons with Down syndrome.

Wilson, E. M., Abbeduto, L., Camarata, S. M., & Shriberg, L. D. (2019a). *Estimates of the prevalence of speech and motor speech disorders in adolescents with Down syndrome*. *Clinical Linguistics & Phonetics*.

Wilson, E. M., Abbeduto, L., Camarata, S. M., & Shriberg, L. D. (2019b). *Speech and motor speech disorders and intelligibility in adolescents with Down syndrome*. *Clinical Linguistics & Phonetics*.

Acknowledgments

This themed issue of *Clinical Linguistics & Phonetics* provides an opportunity to express our sincere gratitude to the many people who have made substantial contributions to the research reported and cited in the six articles. We would like to acknowledge the significant contributions of the caregivers and children who have participated in these studies at the Waisman Center, University of Wisconsin-Madison and elsewhere for the past four decades, the many research colleagues, undergraduate and graduate students, and support staff at the Waisman Center during this period, and to collaborators and their laboratory colleagues at research and clinical sites in the USA, Canada, the United Kingdom, Australia, and the Netherlands. We also want to acknowledge the continuous support of the Phonology Project by the National Institute on Deafness and Other Communication Disorders (NIDCD Grant DC000496) and a core grant to the Waisman Center, Intellectual and Developmental Disabilities Research Center from the National Institute of Child Health and Human Development (U54 HD090256). Finally, special thanks to Dr. Martin Ball, Mirasol Dante and the editorial consultants and production professionals at *Clinical Linguistics & Phonetics* for providing an open access source for this research series.

Funding

This work was supported by the Wellcome Trust [102215/2/13/2]; National Institute on Disability and Rehabilitation Research [H133F070035]; National Institute on Deafness and Other Communication Disorders [DC000496, DC013547-04S1]; United Kingdom Medical Research Council [G0501804 ID 76829]; National Institute of Child Health and Human Development [HD024356, U54 HD090256].