
Personal information

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Conference details

Communication type :	Date:	Location:	Total Expense
Oral Presentation	August 15-19	Melbourne Australia	(USD): 2,209.86

Communication title

Intervention Intensity and Language Intervention for Down Syndrome: Dose, Task Persistence, and Phenotypic Characteristics

ABSTRACT

Aims: Maximizing outcomes for learners with Down syndrome requires an approach which is both effective and efficient. The purpose of this study was to conduct a systematic manipulation of dose, measuring skill acquisition and task persistence during behavioral intervention for communication responses in children diagnosed with Down syndrome.

Method: Children with Down syndrome were taught expressive and receptive language targets using a behavioral intervention. The behavioral intervention approach defines the behavior to be learned very precisely, sets up multiple opportunities to learn the behavior (repeated practice), and uses shaping (rewarding approximate attempts as child is progressing towards goal behavior), prompting (helping child achieve target with full or partial help) and reinforcement for the child. We manipulated three parameters of the dose of intervention: the number of opportunities, the spacing of opportunities, and the session duration. We measured the effects of dose on skill acquisition and task persistence (off-task behavior and affect) using an alternating treatments design.

Results: Children acquired targets faster in conditions in which the spacing of opportunities was shorter than conditions in which the spacing was longer. Manipulating dose produced individual differences during the different intensity levels in the two measures of task persistence. The differing effects of dose were greater for phenotypic weaknesses than strengths.

Conclusion: The results of this study can guide practitioners in developing effective intervention practices for children with Down syndrome; high doses of intervention resulted in more efficient acquisition of communication targets.

COMMUNICATION OUTCOMES

I currently hold a position as a Hegarty Fellow, Post-doctoral Research Associate with the MSU-DOCTRID program. This fellowship is part of collaborative international institute committed to research excellence into Intellectual Disabilities, Autism Spectrum Disorders and other neurodevelopmental disabilities. Our research group broadly focuses on optimizing behavioral intervention for individuals with developmental disabilities.

In figuring out how to optimize outcomes for learners with developmental disabilities, it is not just about the most effective approach, but how much of that effective approach. An inaccurate amount of intervention, whether too high or low, is as problematic as an ineffective approach to intervention. Too little, may mean that children acquire skills very slowly. Too much may provide no added benefit to the child and waste families' time and resources. My program of research identifies ways of enhancing the effectiveness of interventions for individuals with developmental disabilities by tailoring the intensity at which intervention is provided.

The work accepted for presentation focuses on the effects of varying intervention intensity on the effectiveness of behavioral intervention for individuals with Down syndrome. Previous work in this area suggested that increased intervention intensity produced greater gains for individuals with developmental disabilities, but these studies conceptualized intensity in a simplistic manner: the number of hours of intervention. This work builds on this research by using novel control conditions to isolate which aspects of intensity (e.g., pacing, session length, number of teaching opportunities) were responsible for the changes in the effectiveness. For practitioners, knowledge of what makes interventions efficient will assist in intervention planning. For researchers, the design of this study may serve as a model for isolating other aspects of intervention intensity (e.g., number of sessions per week) improving the efficiency of interventions.

Disseminating this work at The International Association for the Scientific Study of Intellectual and Developmental Disabilities (IASSIDD) World Congress will allow a large number of researchers and consumers from around the world, all in the field of disabilities, to contact the results and novel research design of this study. The IASSID is a professional organization devoted to promotion and exchange of research in intellectual and developmental disabilities and the IASSID members meet only every four years for a World Congress. This conference, in particular, provides a unique opportunity for networking. One of the keynote speakers at this conference, Dr. Steven Warren, is also a leader and one of the only other researchers working on the effects of intervention intensity on communication training for individuals with Down syndrome. Attending this conference would provide an opportunity to learn from, share our work with, and establish collaborations with an important figure in our area of research.

PREDICTED TRAVEL EXPENSES

Item		amount (in USD)
Conference Registration	\$	575.00
Airfaire: Detroit to Melbourne	\$	1014.86
Hotel: Aug 15-19 @ \$155/night	\$	620.00
TOTAL	\$	2209.86
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