

# Lessons learnt from applying an integrated knowledge translation (IKT) approach to inform evidence-based practice in a community-based early childhood intervention program

# INTRODUCTION

- Research-practice partnerships are critical to promote evidencebased practice to optimise early childhood intervention (ECI) outcomes.
- An integrated knowledge translation (IKT) approach can facilitate researcher-knowledge user collaborations on issuedriven, applied research to achieve actionable solutions [1].



The Knowledge to Action Model, adapted from [1]

# AIM

To report on the implementation process of an evidence-based assessment protocol for children with co-occurring language and motor difficulties, in a community-based ECI program.

# METHOD

The first three steps of the *Knowledge to Action* model were implemented [1].

## Step 1

#### Identify the Problem: **Knowledge Creation**

- Gap identified in the program's current assessment protocol.
- Systematic search conducted in accordance with the **PRISMA** statement [3] to identify a motor assessment to fill this gap.



## Adapt to Local Context

- Prospective cohort study to profile motor, speech and language skills.
- Allied health honours students and new graduates administered motor and speech assessments.

#### Step 1. Identify the Problem: Knowledge Creation • 26 full text articles were identified through systematic search. 2 Adapt Knowledge • Based on this search and consultation with the program staff, the Movement Assessment Battery for Children - Second Edition (MABC-2) to Local [3] was the motor assessment selected. Context Outcome: an updated assessment protocol that informed current practice and larger scale research. **3 Assess Barriers Facilitators to** Knowldege Use **Step 2. Adapt to Local Context** • 53 out of 79 children (67% consent rate) consented for the prospective cohort study. Motor assessment (MABC-2) conducted by honours occupational therapy (OT) students. • Language assessment (Clinical Evaluation of Language Fundamentals Preschool - 2nd edition, Australian and New Zealand standardised edition [4]) conducted by the program speech pathologists. Step 3. Assess Barriers and Facilitators to Knowledge Use Researchers presented findings of assessments to staff. • Questionnaire completed by 15 staff (2 education assistants, 6 teachers, 4 allied health staff, 2 leadership members). Workshop conducted with 11 staff (4 teachers, 3 speech pathologists, 2 occupational therapists, 2 leadership members). Step 3 **Assess Barriers and** CONCLUSIONS Facilitators to Knowledge Use • Questionnaire on staff An IKT framework can be used in a community-based ECI context to knowledge and beliefs promote evidence-based practice. (n=15). • Workshop conducted with Tailoring IKT strategies to context is critical. staff (n=11) to Having embedded researchers within community contexts can promote identify barriers and facilitators the implementation of evidence-based practice. to implementation of the Knowledge users and researchers working together as "Both Experts", assessment protocol as opposed to a traditional "Researchers as Experts" model, can lead to strengthening collaborative relationship, building capacity for both parties, and successful implementation of evidence in practice [1].

**Context**: Specialised program for 4–5-year-old children with language delays/disorders (n=79) delivered by education and allied health professionals within an independent school.

## Y. KISHIDA<sup>1,2,3,4</sup>, R. WARD<sup>2</sup>, M. HATFIELD<sup>2</sup>, J. W. L. THIO<sup>2</sup>, & S. LEITÃO<sup>2,5</sup>

1 TSH Ltd, Perth, Australia, 2 Curtin University School of Allied Health, Curtin University, Perth, 3 Brain and Behaviour, Telethon Kids Institute, Perth, Australia, 4 Macquarie School of Education, Macquarie University, Sydney, Australia, 5 Curtin enAble Institute, Curtin University, Perth, Australia

# RESULTS



## Workshop Responses(n=11)

### Barriers

- Resource availability
- Assessment characteristics
- Demands on the child

## **Facilitators**

- Improve resources
- Modify assessment protocol
- Communicate with families

## Strategies

- Staff time allocation
- PD opportunities
- Participatory action research
- Program modifications

# REFERENCES

- 1. Graham, I.D., et al., Moving knowledge into action for more effective practice, programmes and policy: Protocol for a research programme on integrated knowledge translation. Implementation Science: IS, 2018. 13(22): p. 1-15.
- 2. Sanabria, A., et al., Relationships among motor, first, and second language skills among bilingual children with language disorders. Journal of Speech, Language, and Hearing Research, 2023. 66(9): p. 1-3549.
- 3. Henderson, S.E., D.A. Sugden, and A.L. Barnett, *Movement Assessment Battery* for Children 2nd edition (Movement ABC-2). 2007, The Psychological Corporation: London, UK.
- 4. Wiig, E.H., W.A. Secord, and E. Semel, Clinical Evaluation of Language Fundamentals Preschool - 2nd edition, Australian and New Zealand standardised edition (CELF P-2 Australian and New Zealand). 2006.
- 5. Fixsen, D., et al., Implementation science, in International encyclopedia of the social and behavioral sciences, J.D. Wright, Editor. 2015, Elsevier: Amsterdam, Netherlands.

## **KEY LEARNINGS: ESSENTIALS FOR EFFECTIVE IMPLEMENTATION**

Collaboration among stakeholders as equal partners throughout the process [1].

Having champions, or ideally an implementation team [5].

# ACKNOWLEDGEMENTS

Ethics approval was obtained from Curtin University Human Research Ethics Office, and written informed consent was obtained by all participants.

The authors received no financial support for the research. The authors wish to thank the children, families and staff members at TSH Ltd for their participation in this study, and would also like to acknowledge and thank Su Lin Elisabeth Cheng, Jessica Cheng Kim Gui, Jamie Junita Raj, and Kate Beilby for their contribution to this study.





Telethon Speech & Hearing

Curtin University



## **CONTACT INFORMATION** Dr Yuriko Kishida, TSH Ltd. <u>ykishida@tsh.org.au</u>