Investigating remote coaching modalities to ensure AAC intervention fidelity among parents and professionals: insights from a multi-centric study

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Context

- Parents and health professionals represent key communication partners (Kent-Wash, Murza, Malani & Binger, 2015)
- Training interventions focused on knowledge exhibit limited impact onto changing practices
- When **reflexive modalities** are implemented for educators, benefits of interventions are increased (Markussen et al., 2017)
- **Associating modeling with performance feedback**, regardless of the duration of the intervention, produces satisfying results (Brock & Carter, 2017).

Rely on the presence of the trainer ➔ narrow down spreading such evidence-based practice due to geographical and economic constraints Hence, researchers are now **investigating the opportunities of new technologies** for training and coaching parents and health professionals (Wainer, Pickard & Ingersoll, 2017).

Objective. This work aims to investigate: 1) the feasibility of implementing and animating remote training/coaching AAC interventions based on an innovative AAC application; 2) the modalities allowing the greater benefits for both AAC users and their stakeholders.

Method

We deployed a mobile application-based intervention **named Tiwouh**. Similar to the PECS protocol (Picture Exchange Communication System; King et al., 2014), this four-stepped intervention aims toward introducing an assistive application to allow children with CCN making basic requests in real-life situations. Each step involves a trainer and a communication partner, alternatively embodied by a parent and a health professional.
Participants were recruited on 3 different French-speaking locations (Belgium, France, Switzerland): parents and speech-therapists.

- **Self-efficacy**
(Sense of Competence Questionnaire, Jansen et al., 2007)
- **Implementation fidelity**
(video-recording of sessions)
- **Requesting skills of children**

Initial training
Presentation of the assistive tool
Clinical vignette
Modeling
Content developement

Condition 1
Face-to-face supervision
N=10

Condition 2
Remote indivdual supervision
N=15

Performance feedbacks during each session

Individual remote supervision
(Email, Facebook, Skype)

Speech-therapist and child using AAC application Tiwouh

Early results

- A remote AAC intervention is successfully implemented through individually coaching both parents and health professionals (mostly speech therapists)
- Insights on barriers that have to be addressed especially for remotely coaching a group of users are gathered
- Self-efficacy does not seem to be related to fidelity for both parents and health professionals.

However, as interventions are still ongoing, data have to be gathered and computed to confirm our hypotheses.

Conclusion – Take home message

This study will give insights on the feasibility of remote coaching in AAC interventions. The upcoming results will help highlight the needs and constraints of health professionals and families in terms of implementation of AAC intervention.

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