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Meaningful modalities

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Chapter 6

General Discussion

6.1 Introduction

As stated in Chapter 1, several problems arise in everyday interactive and communicative situations between people with CDB and their communication partners. To be able to solve these problems, communication partners need to find ways to adapt their interactive and communicative behaviors to those of the people with CDB; communication partners must use behaviors that characterize the tactile-bodily communicative modality. Since the tactile-bodily modality is a communicative modality that is relatively unknown to most communication partners, explicit training in its use is necessary. Therefore, the aim of this thesis was to present an intervention program that focuses on optimizing the use of communication partners' tactile-bodily interactive and communicative behaviors: the IMTC. Its effectiveness was measured by means of a pilot study and two effect studies.

In order to answer the main research question and the sub-questions that were presented in Chapter 1 of this thesis, this final chapter summarizes the major findings of the research on the IMTC. Furthermore, the findings are complemented by a critical reflection on the studies that were carried out. Finally, this chapter discusses implications for clinical practice and recommendations for future research.

6.2 Major Findings

This first subsection of this chapter discusses the intervention model that underlies the IMTC. Since its effectiveness was measured by means of a pilot study and two effect studies, the second subsection discusses the major findings of those studies.

6.2.1 The intervention model that underlies the IMTC.

As stated above, the intervention model that underlies the IMTC focuses on optimizing the use of communication partners' tactile-bodily interactive and communicative behaviors. It consists of three intervention phases in which communication partners are actively trained to improve their tactile-bodily interactive and communicative behaviors: 1) Tactile Sign Language of the Netherlands; 2) Tactile Interaction; and 3) Tactile Communication.

Analyses of video recordings that were gathered while carrying out the IMTC focused on three observational categories: 1) auditory initiatives; 2) tactile-bodily initiatives; and 3) tactile-bodily signs and/or gestures. In the next subsection, the major findings of the three studies that were carried out to determine the effectiveness of the IMTC will be discussed in terms of these observational categories.

6.2.2 The IMTC in practice: major findings of three studies on the IMTC.

The pilot study, which was a single-case study (see Chapter 3), revealed interesting improvements in the interactive and communicative behaviors of the participant with CDB and his two communication partners. Effects were measured using the previously defined observational categories. During this pilot study, we observed the intervention effects for two observational categories (tactile-bodily initiatives and tactile-bodily signs and/or gestures) for both communication partners. Intervention effects for the other observational category (auditory initiatives) were observed for only one communication partner. We measured the intervention's effects on the participant with CDB for all observational categories.

The effects of the IMTC that were measured by this pilot study led to the next phase of the study, which is central to this thesis: a first effect study in which we analyzed data about five persons with CDB and five of their communication partners (see Chapter 4). Major findings about the communication partners varied for each of the observational categories. For the ‘auditory initiatives’ category, we observed intervention effects for two of the communication partners. Further, intervention effects were observed for four communication partners for the ‘tactile initiatives’ category, and intervention effects for three communication partners for the ‘tactile-bodily signs and/or gestures’ category. For the persons with CDB, we only measured intervention effects for two observational categories: tactile-bodily initiatives and tactile-bodily signs and/or gestures.

The next and final phase of the study consisted of a second effect study in which three children with CDB and three of their communication partners participated (see Chapter 5). Major findings for each of the observational categories also varied for the communication partners in this study. Expected decreases in the ‘auditory initiatives’ category were only found for one communication partner, whereas we observed unexpected increases for two communication partners. In the ‘tactile-bodily initiatives’ category, we observed expected increases for two of the communication partners; the other one experienced a slight, unexpected decrease. In the ‘tactile-bodily signs and/or gestures’ category, the expected increases were observed for all three communication partners. For the persons with CDB, we observed intervention effects for two observational categories: auditory initiatives and tactile-bodily initiatives.

6.3 Critical Reflections on the Study

Several critical considerations of this thesis need to be taken into account; these are discussed below. A first critical consideration concerns the observational categories that were chosen for measuring intervention effects. Since the ‘auditory initiatives’ category was observed very rarely, this observational category might be replaced by another (e.g., tactile-bodily confirmations) when replicating the IMTC. Another critical consideration concerns the fact that follow-up measurements are lacking. Follow-up measurements would have made it possible to give an even more detailed description of the effects of the IMTC.

In general, previous intervention studies on interaction and communication with persons with CDB have described several interesting intervention effects (Chen & Downing 2006; Janssen, Riksen-Walraven, & Van Dijk, 2002; Janssen, Riksen-Walraven, & Van Dijk, 2003a; Janssen, Riksen-Walraven, & Van Dijk, 2003b; Rødbroe & Souriau, 1999; Sigafos, Didden, Schlosser, Green, O’Reilly, & Lancioni, 2008). The current study shows that a modality-specific approach during an intervention might be especially valuable for interventions in everyday practice. However, more extended and profound research on the effects of the IMTC, in terms of defining and analyzing more observational categories, might be needed in order to prove that such a modality-specific approach should be a starting point for future intervention models on interaction and communication with people with CDB.

A second, more general, problem that often arises in intervention studies of people with CDB and their communication partners is finding large-enough sample sizes. Since the target group of such studies consists of

a relatively small number of individuals, it is very difficult to find large samples. This lack of large samples makes it practically impossible to derive generalizations about the target group. In addition, the heterogeneous population of people with CDB makes it very difficult to generalize outcomes to subgroups in which the population can be divided.

6.4 Clinical Implications

The findings presented in this study suggest a number of implications for clinical practice. First, this study revealed that communication partners are able to implement interactive and communicative behaviors in order to solve some of the problems that arise with the ‘communicative modality mismatch’. As a consequence, communication partners should be actively engaged in everyday interactive and communicative situations and should be aware of their role as key figures in creating and developing interaction and communication with people with CDB. Opportunities for using tactile-bodily interactive and communicative behaviors and creating narrative-based communication should be exploited. At the same time, communication partners should develop ways to enable optimal attunement between various communication partners, with regard to the tactile-bodily behaviors that are used. Both communication partners who work with people with CDB in professional settings and communication partners who live with them in private settings should be involved in processes of creating optimal attunement. This will expand and optimize the opportunities people with CDB have to develop their interactive and communicative behaviors.

Secondly, since communication partners’ adequate use of tactile-bodily interactive and communicative strategies, including the use of Tactile

Sign Language of the Netherlands, obviously requires ongoing training and coaching, clinical practice should be aimed at continuously using and developing interaction and communication coaching by means of video analysis. This continuous coaching with regard to interaction and communication should not only be aimed at using tactile-bodily interactive and communicative skills, but should also focus on general information (e.g., about the processes people with CDB use to receive and process information, the importance of individual preferences and abilities).

6.5 Recommendations for Future Research

Based on the outcomes presented in this thesis, several recommendations with regard to future research can be formulated. First, this study revealed that the tactile-bodily approach that characterizes the IMTC is successful with regard to several aspects of interaction and communication.

Intervention programs that are developed in the future might also consider the importance of a tactile-bodily approach as a starting point for interaction and communication interventions for the communication partners of people with CDB.

Secondly, based on the difficulties related to how the heterogeneity of the population of people with CDB influenced the outcomes of our study, future intervention studies might choose a study design that differentiates between subgroups for different types of congenital deafblindness and different age groups. Influencing these internal factors might give more detailed results on the effects of interaction and communication coaching.

Furthermore, it is recommended that future researchers carry out longer intervention studies on interaction and communication coaching.

Whereas the intervention period in our study lasted 20 weeks, the previously discussed extended period of time that persons with CDB need to receive and process information makes it likely that a longer intervention would provide new and more detailed information about intervention effects with respect to interaction and communication.

Finally, future researchers are advised to consider the possibility and necessity of involving persons who are deaf or hard of hearing, and/or deafblind themselves, in the processes of developing and carrying out a particular intervention program. The contributions that these people could make based on their own experiences are very valuable.

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