Implementing Intensive Interaction in a Daycare Setting for People with Profound Intellectual and Multiple Disabilities (PIMD) to Improve Teacher-pupil Communication in Taiwan: Using Physical Support Approach

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Background

- People with PIMD mostly communicate in a presymbolic way using idiosyncratic, such as vocalizations, facial expressions or changes in body position (Stillman & Siegel-Causey, 1989).

- Previous research had shown that people with PIMD tend to be more passive in interactions with others (Pennington & McConnachie, 1999).

- Intensive interaction is an approach used to improve interaction and fundamental communication for people in a pre-verbal level of communication. (Nind & Hewett, 1994)
Background cont.

- Intensive interaction
  - It is based on people being active participants, and teachers followed the pupils’ lead during the interaction and responded to their behaviors as intentional. (Nind & Hewett, 1994; Firth et al., 2008)

Background cont.

- Thinking about touch
  - Touching is a direct mode which living creatures interact with the environment and each other. (McDanel and Anderson, 1998)
  
  - Touch or physical contact is the first and most basic form of communication. (Hewett, 2007)
Physical Support Approach (PSA)

- PSA is to provide a light physical contact to people in order to feel and then respond to their possible communication initiation behaviors with the purpose of increasing their active participation in communication interaction.

How to do intensive interaction using PSA

- Light physical support
- Pauses and wait
- Responding to the client's possible intentional behaviors
- Following the client's lead and sharing control of the activity

- Become more engaging and meaningful for the clients
- Creation of mutual pleasure

Nind (1996) identified five central features of Intensive Interaction
Purpose

- To investigate the communication behavior between teachers and pupils by examining teacher-pupil interactions, when teachers implemented Intensive Interaction through physical support approach (PSA).

Method-Subjects

- Three teachers-pupil dyads
  - Maria PIMD Daycare Center
  - Pupils were initially identified as demonstrating pre-intentional or emerging intentional communication. (Grove et al, 1999)

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Pupil</th>
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<tbody>
<tr>
<td></td>
<td>Year of experience</td>
</tr>
<tr>
<td>A</td>
<td>7 years</td>
</tr>
<tr>
<td>B</td>
<td>1 years 10 month</td>
</tr>
<tr>
<td>C</td>
<td>13 years 4 month</td>
</tr>
</tbody>
</table>
Procedures-baseline

- Three video sequences of at least 5-minutes’ length showing each individual pupil involved in ‘informal pupil-lead activities’

(Barber, 2008)

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Procedures-Intervention

- Intensive interaction and PSA Training
  - 2 days workshop
  - Handout instructions
  - Case discussions
  - Doing PSA informally when pupils appeared to initiate or show interest in an object or activity.
Procedures-Evaluation

- A second set of video sequences were recorded during activities which matched the baseline recordings after 15 weeks of intervention.

Data

- Average number of turns, initiations, and responses of pupils during baseline and evaluation period were coded and analyzed to describe communication behavior.

(Anderson, 2006)
Operational Definition

• A turn:
  • a sequence of speaker behavior where the contribution of each participant is described and coded in relation to the topic of the interaction.
  • a verbal element, non-verbal elements, or both.

• Each turn is coded to note
  • whether the teacher or the pupil took the turn;
  • whether it was an initiation or a response;

(Anderson, 2006)

Operational Definition

• Initiations:
  • starting a conversation or causing a change in topic or subject shift.

• Responses:
  • turns where a reply is made to an initiation

(Anderson, 2006)
Result

- Eighteen video recorded sessions were sampled purposely to identify communication behavior.

Results - Number of turns

- The average number of turns of all three pupils during baseline and examination period
Result-
Percentage of initiation A

- The average percentage of the total initiation of turns of pupils in three dyads.

![Dyad A Diagram]

Result-
Percentage of initiation B

- The average percentage of the total initiation of turns of pupils in three dyads.

![Dyad B Diagram]
Result-
Percentage of initiation C

- The average percentage of the total initiation of turns of pupils in three dyads.

Discussion

- After providing intensive interaction through physical support approach, numbers of turns and initiation behaviors of pupils were all increased.

- These indications may supported by previous studies that intensive interaction is an approach used to develop teacher-pupil communication with people who use basic pre-verbal techniques to communicate, and who have difficulty interacting with others. (Nind & Hewett, 1994; Leaning, 2006)

- In addition, physical support or communication touch to pupils could be a basic approach for teachers to recognize pupils’ tiny possible communication signals. (Hewett, 2007)
Number of turns

- The biggest changes were noted in dyad B.
  
  - Compared to other dyads, teacher B with less experience in teaching people with PIMD, therefore she may learn this new approach easier.
  
  - Teachers with less experience in working with people with PIMD may be not yet get used to ‘traditional’ teaching style which is based mainly on verbal communication.

Percentage of initiation

- Compared to other pupils, pupil A showed some initiation behavior in baseline period, but her initiation turns in examination period didn’t show “huge steps” forward.
  
  - The reason might be, for young children, it is important not only looking at the quantitative data but also considering the qualitative information, such as communication function (requesting or commenting) or verbal behaviors.
Conclusions

- Intensive Interaction through physical support approach could be one of the strategies to improve teacher-pupil communication for practitioners, when starting introduce Intensive Interaction to people with PIMD.

References


Thank you for listening!!