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Effect of Intervention in Teaching Listening and Speaking Skills on Children with Intellectual Disabilities

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EFFETTO DELL’INTERVENTO DIDATTICO SULLE CAPACITÀ DI ASCOLTO E CONVERSAZIONE IN BAMBINI CON DISABILITÀ INTELLETTIVE

Abstract

Intervention in teaching listening and speaking skills using communicative language teaching approach and teaching strategies adopted from Applied Behaviour Analysis was designed and tested in the current research. Non-randomized pre-test post-test control group design was used in quasi-experimental research where fifty-two children with mild and moderate intellectual disabilities fulfilling inclusive and exclusive criteria were placed into experimental and control groups from five special schools of Jammu district in J&K. BASIC-MR, a validated tool was used on both the groups as a pre-test and post-test. Children in experimental groups were taught listening and speaking skills using communicative language teaching approach. ANCOVA analysis indicated $F (1, 28) = 118.401, p = .000$ in the children with mild intellectual disabilities, and $F (1, 32) = 77.789, p = .000$ in children with moderate intellectual disabilities. It was inferred that intervention was effective in developing listening and speaking skills of the children with mild and moderate intellectual disabilities.

Keywords: Communicative language teaching approach; Intellectual disabilities; Intervention; Listening; Speaking.
A large portion of the information which the children with intellectual disabilities acquire throughout their life is spoken, rather than written communication which emphasized the importance of the development of listening and speaking skills. Oral interaction skills are important for literacy and beginning-level learners because they form the basis for language development. The development of these oral communication skills plays a vital role in the reading readiness programs in special education. The skill of listening and speaking may be developed through games, telling stories, making announcements, giving descriptions, using the telephone, taking part in discussions and conversations, making introductions, and participating in choral reading exercises.

All students should have the opportunities to learn through literacy or reading, even if they do not all become literate (Mims et al., 2009). But becoming literate is not possible for people with intellectual disabilities is a common perception (Moni et al., 2011) in spite of the advocacy for developing literacy skills for their successful and rewarding participation in the community. Findings of different authors suggested that individuals with intellectual disabilities can develop literacy skills and that these will continue to develop through adolescence and beyond (Bochner, Outhred, & Pieterse, 2001; Moni & Jobling, 2001; Van den Bos et al., 2007; Moni et al., 2011). Many researchers are now reporting the continuing literacy development among groups of post-school aged individuals with intellectual disabilities (Morgan, Moni, & Jobling, 2004; Moni, Jobling, & van Kraayenoord, 2007).

1. COMMUNICATIVE LANGUAGE TEACHING APPROACH

Communicative language teaching gives more importance to communicative competencies rather than grammatical accuracy or perfect pronunciation. The goal of language education in communicative language teaching approach is the ability to communicate in the target language (Savignon, 1997) which is in contrast to previous views that gives top priority to grammatical competence (Bax, 2003). Communicative language teaching has been serving the language teaching profession since 1970 (Richards & Rodgers, 2001; Bax, 2003). However, still, it is claimed that this method is not finding its full expression (Bax, 2003; Richards, 2006) because different authors perceive communicative language teaching approach to be neglecting the teaching of grammar and often focused on open-ended discussion activities. Moreover, many teachers are not sure how to implement it in language classrooms (Gatbonton & Segalowitz, 2005).
The teaching of language through communicative language teaching approach in Indian special schools for the children with intellectual disabilities is an entirely new idea and depends upon different factors. Since this approach has been developed in the west, it has taken time to be adopted in Indian classrooms, because of the lack of course in communicative language teaching in the curriculum of teacher educators. The examination system is more achievement-oriented rather than performance-oriented (Gupta, 2005). The communicative approach to language teaching was established in the Indian context after a dynamic socio-economic change around the year 2000 as a result of which there was introduction of communicative language teaching curriculum by Central Board of School Education in all its affiliated schools, infusion of technology with the teaching of English in the form of Language Labs, and reframing of the curriculum by some universities on communicative language teaching pattern (Gupta, 2005).

In Indian classrooms, there are different obstacles using communicative language teaching, including large class sizes, excessive use of traditional methods, lack of well-qualified and trained teachers, lack of communicative teaching materials, lack of understanding about communicative language teaching by teachers and students, geographical and cultural constraints, etc. (Fazili, 2007).

A higher proportion of persons with intellectual disability live in low and middle-income countries (Mckenzie, McConkey, & Adnams, 2013) and there is very little evidence-based intervention research in testing the effect of communicative language teaching approach on these children. In India, there are nearly one thousand special schools for children with intellectual disabilities most of them are managed by non-government organizations. In Indian special schools, there are little evidence-based teaching strategies, no pre-defined objectives and curriculum to teach language skills such as listening and speaking skills to children with intellectual disabilities.

2. THE CURRENT STUDY

The purpose of the current study was to determine the effectiveness of the intervention in teaching listening and speaking skills using communicative language teaching approach on the children with mild and moderate intellectual disabilities. This study sought to answer the following research questions:
• Does intervention in teaching listening and speaking skills using communicative language teaching approach have a significant effect on the children with mild and moderate intellectual disabilities?
• Is the effect size of the intervention in teaching listening and speaking skills on children with mild intellectual disabilities higher than children with moderate intellectual disabilities?

3. Method

3.1. Setting

Five special schools in the Jammu district of Jammu and Kashmir state, India were selected for the study with a total population of children with mild intellectual disabilities (N = 45), children with moderate intellectual disabilities (N = 58) and children with severe intellectual disabilities (N = 26).

3.2. Selection criteria and participants

Seguin Form Board Intelligence test (Goel & Bhargava, 1990) was administered individually to all children at five special schools of Jammu district in J&K (India) to determine their IQ. Based on their IQ scores, children with intellectual disabilities were categorized as mild, moderate and severe intellectually disabled as per the International Classification of Diseases-10 criteria (WHO, 1992).

Fifty-two children with mild and moderate intellectual disabilities fulfilling inclusion and exclusion criteria included thirty-nine children with mild intellectual disability and thirteen children with moderate intellectual disability (Tab. 1). Fifty-two children completed the intervention but three children were unable to continue the research period because they left the school. The inclusion criteria included children of both sexes with mild and moderate intellectual disabilities as identified by an IQ test, children who could understand instructions related to teaching listening and speaking skills and children attending the special schools five days per week for 5 hours a day. The exclusion criteria were children with cerebral palsy and multiple disabilities, children with severe and profound intellectual disabilities, children who were on antidepressant or sedative medication, children who had severe behaviour disorders or destructive behaviour. Total 48% of the sample belonged to the urban area and 52% of the sample belonged to the rural area.
Table 1. – Children with mild and moderate intellectual disabilities (Age and Intelligence Quotient) selected for intervention in teaching listening and speaking skills using a communicative language teaching approach.

<table>
<thead>
<tr>
<th>Type of disability</th>
<th>Group</th>
<th>N</th>
<th>Male</th>
<th>Female</th>
<th>Age (yrs)</th>
<th>IQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>Control</td>
<td>19</td>
<td>09 (8*, 1**)</td>
<td>10 (10*)</td>
<td>12.70</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>Experiment</td>
<td>20</td>
<td>16 (12*, 4**)</td>
<td>04 (2*, 2**)</td>
<td>12.78</td>
<td>3.07</td>
</tr>
<tr>
<td>Moderate</td>
<td>Control</td>
<td>07</td>
<td>05 (4*, 1**)</td>
<td>02 (2*)</td>
<td>11.78</td>
<td>3.76</td>
</tr>
<tr>
<td></td>
<td>Experiment</td>
<td>06</td>
<td>04 (4*)</td>
<td>02 (1*, 1**)</td>
<td>12.05</td>
<td>1.07</td>
</tr>
</tbody>
</table>

Note: * Children with intellectual disabilities; ** Autistic; *** Down syndrome.

3.3. Research design

Non-randomized pre-test post-test control group design was used in quasi-experimental research where participants fulfilling the inclusion and exclusion criteria were placed into experimental and control groups. Randomized matching of children was practically impossible due to limited sample and complications associated with an intellectual disability so the natural setting of the children was not disturbed to avoid the inconvenience which could reduce the effectiveness of the intervention. Children with both mild and moderate intellectual disabilities were placed separately in the experimental and control groups forming four non-equivalent groups. A random procedure was used to place the children in experimental and controlled conditions. Because of non-equivalent groups, differences in these groups were controlled in the data analysis during the estimation of the effects of an intervention using Analysis of Covariance. In the current research design, the technique of ANCOVA was used to compensate for the lack of equivalency between the groups. The independent variable (experimental variable) is the intervention in listening and speaking skills using communicative language teaching approach, whereas, listening and speaking skills is the dependent variable.

3.4. Intervention agent

The teachers at special schools having minimum five years of teaching experience of teaching children with intellectual disabilities were provided one-week training in Applied Behaviour Analysis, communicative language teaching approach, different listening and speaking skills as well as assistance with implementation of the module.
3.5. Intervention fidelity

Teachers implemented the intervention programme at special schools as planned and were flexible to individual needs simultaneously. All the teachers in all the special schools adhered to a single training protocol to maintain the standardized delivery. The teachers maintained a logbook recording the activities of the intervention programme which ensured that important activities were covered timely and reasons were recorded for non-performance of activities. The researchers observed the first two training sessions in each school during the intervention and provided feedback to the teachers during their weekly meetings to further standardize the intervention. However, there was no modification in the intervention program during the course of study.

3.6. Measures

Seguin Form Board Test (Goel & Bhargava, 1990). It was used to assess Intelligence Quotient through visual discrimination, matching, speed, accuracy, eye-hand coordination, and visual-motor skills. It is the most commonly used performance test for measuring psychomotor and visual-perceptual abilities for children between 4 and 20 years. Revalidated norms for Seguin Form Board Test for Indian children was used (Venkatesan, 1998). It is also used as quick measures of general intelligence in children with intellectual disabilities and adults. This scale was re-standardized by the researchers where test-retest was done after 20 days' time interval to check the reliability of the scale $r (25) = 0.81$.

Behavioural Assessment Scale for Indian Children-MR (Part-A) (Peshawaria & Venkatesan, 1992). It has been designed to elicit systematic information on the current level of behaviours in school going children with intellectual disabilities. The scales are suitable for children with a mental handicap between 3-18 years. It helps to assess the current level of skill behaviours in the child. It consists of 280 items grouped under the seven domains such as motor, activities of daily living (ADL), language, reading-writing, number-time, domestic-social, and prevocational. There are forty items in each domain. Skill behaviours studied in the current research was language skill only. The researchers re-standardized BASIC-MR (Part-A) with test-retest reliability coefficient $r = .702, p < .01$ for language (listening and speaking skill) after 30 days time interval.
3.7. Procedure

The Department of Education, University of Jammu approved this research design. After explaining the details of the research, permission from the heads of special schools was granted. Parents were assured of the confidentiality of the identities and personal information of their children during reporting of the study. Children were given the choice to voluntarily withdraw from the trial without giving any reason.

Pre-testing procedures. BASIC-MR (Part-A) (language skill) (Peshawaria & Venkatesan, 1992) was administered to the children in all the four non-equivalent control and experimental groups as a pre-test.

Intervention. Module for intervention in teaching listening and speaking skills prepared by the researchers was introduced to the experimental group in the selected special schools of Jammu (J&K). The children were taught listening and speaking skills using communicative language teaching approach and teaching strategies from Applied Behaviour Analysis. Children in the control group continued with their everyday activities and were not involved in any additional teaching in listening and speaking skills.

3.8. Preparation of module for intervention

This intervention module was drafted after studying available literature related to language skills (listening and speaking skills), different approaches to teaching language skills and teaching strategies adopted by special schools at national and international level and incorporating suggestions from the language teachers. Different Indian publications consulted were Functional academics for students with mental retardation (Myreddi & Narayan, 1998), Grade level assessment device for children with learning problems in schools (Narayan, 2003), Behavioural Assessment Scale for Indian Children-Mental Retardation (Peshawaria & Venkatesan, 1992), and Manual on developing communication skills (Rao, 1994).

The pre-final version of the module was discussed in a group session with the language teachers, and head of the special schools. The session was moderated by the researchers. Teachers were provided with a copy of the module and were asked to carry out the suggested intervention at a special school.

Try-out of the intervention module. The intervention module was administered to the children with mild and moderate intellectual disabilities (N = 10) for two weeks, each session lasting for about one hour. Based on the experiences of the teachers, their suggestive feedback was incorporated in the final version of the intervention module.
After getting feedback from the language teachers, heads of the special schools, special educators in the field of intellectual disability and parents of the children with intellectual disabilities, a final version of intervention module was modified, edited and finalized. Teacher’s approval that selected children could follow the instructions and their willingness to implement the intervention program was also sought. The program included individualized and group activities which were adopted sequentially, well supervised and implemented. Children were taught under the supervision of two teachers who were well trained to implement the intervention as planned for two weeks by the researchers.

3.9. Applied Behaviour Analysis

Applied behaviour analysis teaching methods use scientific data to improve instructional and interactive techniques by breaking down and examining the fundamental human behaviours. It is a systematic approach that assesses and evaluates a student’s behaviour and applies interventions to modify behaviour of children with intellectual disabilities. Applied Behaviour Analysis has been successful in shaping students’ behaviour. It helps to develop treatment goals which emphasize to achieve greater independence for these children, providing abundant positive reinforcement for desired behaviours and no reinforcement for harmful behaviours. In the current research, intervention in teaching listening and speaking skills were given to the experimental group using teaching strategies adapted from Applied Behaviour Analysis such as verbal instruction, modelling, role-playing, prompting, rewards, and feedback. Each selected activity was first modelled by the teacher then each child was motivated to perform the activity. Role-play was helpful to engage children to create interest and provide opportunities for practice and feedback, each child was motivated to role-play the situation which allowed them to rehearse the situations two to three times. Teachers used appropriate prompting which helped the children to learn specific target behaviour. During the training of the skills, the teachers appropriately provided positive feedback and rewarded them with rewards for their positive efforts.

3.10. Listening and speaking skills

Listening and speaking skills to be taught using communicative language teaching approach and teaching strategies adopted from Applied Behaviour Analysis (Tab. 2).
<table>
<thead>
<tr>
<th>S. no.</th>
<th>Listening and speaking skills</th>
<th>S. no.</th>
<th>Listening and speaking skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To locate different items/persons by looking at them.</td>
<td>21</td>
<td>To teach how to identify and name fruits.</td>
</tr>
<tr>
<td>2</td>
<td>Respond/obey verbal and gestural commands.</td>
<td>22</td>
<td>To teach how to answer ‘Whose’ questions.</td>
</tr>
<tr>
<td>3</td>
<td>Follow simple commands with appropriate gestures/realia.</td>
<td>23</td>
<td>To teach how to use different prepositions.</td>
</tr>
<tr>
<td>4</td>
<td>Teach how to point their different parts of the body.</td>
<td>24</td>
<td>To teach how to follow two-step instructions.</td>
</tr>
<tr>
<td>5</td>
<td>Teach how to point towards different familiar objects surrounding them.</td>
<td>25</td>
<td>To teach how to answer ‘Which’ questions.</td>
</tr>
<tr>
<td>6</td>
<td>To teach how to point towards pictures in the book.</td>
<td>26</td>
<td>To teach how to answer ‘Why’ questions.</td>
</tr>
<tr>
<td>7</td>
<td>To teach how to imitate the vowel sounds.</td>
<td>27</td>
<td>To teach the meaning of different adjectives.</td>
</tr>
<tr>
<td>8</td>
<td>To teach how and when to nod the head to say «yes» or «no».</td>
<td>28</td>
<td>To teach how to follow different adjectives.</td>
</tr>
<tr>
<td>9</td>
<td>To teach how to indicate any five basic needs by pointing/ gesturing.</td>
<td>29</td>
<td>To teach the concept of whole/part.</td>
</tr>
<tr>
<td>10</td>
<td>To teach how to speak single words meaningfully.</td>
<td>30</td>
<td>To teach how to follow three-step instructions.</td>
</tr>
<tr>
<td>11</td>
<td>To teach how to speak out his/her name when asked by anyone.</td>
<td>31</td>
<td>To teach how to identify the first, middle and last in the group.</td>
</tr>
<tr>
<td>12</td>
<td>To teach how to imitate the sounds of animals and inanimate objects.</td>
<td>32</td>
<td>To teach how to follow left-right.</td>
</tr>
<tr>
<td>13</td>
<td>To teach how to speak two-word phrases in different situations.</td>
<td>33</td>
<td>To teach the meaning and significance of sight words.</td>
</tr>
<tr>
<td>14</td>
<td>To teach how to speak about the use of familiar objects.</td>
<td>34</td>
<td>To teach how to sequence a story on flashcards.</td>
</tr>
<tr>
<td>15</td>
<td>To teach how to describe verbally the actions in pictures.</td>
<td>35</td>
<td>To teach how to follow traffic signals.</td>
</tr>
<tr>
<td>16</td>
<td>To teach how and when to use simple commands.</td>
<td>36</td>
<td>To teach the voting rights of citizens and the significance of conducting elections.</td>
</tr>
<tr>
<td>17</td>
<td>To teach the concept of sex (boy or girl).</td>
<td>37</td>
<td>To teach how to recite the rhyme of at least 3-4 lines.</td>
</tr>
<tr>
<td>18</td>
<td>To teach identification and naming different vehicles.</td>
<td>38</td>
<td>To teach how and when to use complex sentences.</td>
</tr>
<tr>
<td>19</td>
<td>To teach how to identify and name animals.</td>
<td>39</td>
<td>To teach how to speak jokes.</td>
</tr>
<tr>
<td>20</td>
<td>To teach how to identify and name vegetables.</td>
<td>40</td>
<td>To teach how to carry on the simple conversation.</td>
</tr>
</tbody>
</table>
3.11. Classroom activities in teaching listening and speaking skills using communicative language teaching approach

Teachers choose classroom activities which they believe will be most effective for the children to develop communicative abilities. The six activities explained below are commonly used in communicative language teaching classrooms.

**Role-play.** It should be done in pairs which aim to develop a child’s communicative abilities. For example, the teacher should set the scene where the conversation takes place. Then define the goal of the children conversation by giving them a simple topic to converse.

**Interviews.** It is an oral activity done in pairs, whose main goal is to develop students’ interpersonal skills (Brandl, 2007). The teacher gave each child the same set of questions to ask their partner and the children take turns asking and answering the questions in pairs.

**Group work.** A good teacher can design the activity well so that each child contribute and benefit equally from the activity (Brandl, 2007). Different groups of more than six children were formed and each child was assigned a specific role within the group (e.g member A, member B, etc.). Each group was given the same task to complete in a designated amount of time. All the children were encouraged to participate in the group activity to complete the task and contribute equally to the group task.

**Opinion sharing.** It is a content-based activity, whose purpose is to engage students’ conversational skills while talking about something they care about (Richards, 2006). The teacher introduces a topic and asks children to express their opinions on any content/skill.

**Storytelling-oral and with the use of pictures or props.** Storytelling session should be communicative and interactive. Through stories, teachers helped children to know different things, concepts, real-life situations and patterns of life.

**Use of realia.** Realia helps to recognize an object and reduces lengthy explanations and drawing pictures on the blackboard. Children were encouraged to respond to the desired word as the use of realia stimulates the mind, and encourages creativity by involving the senses.

3.12. Time schedule

The intervention to the experimental group comprised of forty listening and speaking skills. Each skill was taught for 60 minutes daily for one week
which took forty weeks. All the skills were practiced for another twelve weeks (total 52 weeks) after forty weeks.

Post-testing procedures. Assessment after 52 weeks was done after the completion of intervention program by administering BASIC-MR (Part-A) (language skill) (Peshawaria & Venkatesan, 1992) to both the control and experimental groups to find out the effect of an intervention in teaching listening and speaking skills using communicative language teaching approach on the children with mild and moderate intellectual disabilities.

3.13. Statistical analysis

The data obtained was statistically analyzed using the Statistical Package for Social Sciences (version 16.0 for Windows). Analysis of Covariance was performed in the current study because it is used in quasi-experiments when subjects cannot be assigned randomly to control and experimental groups (Vogt, 1999). In non-randomized designs, the ANCOVA adjust the post-test means for differences among groups on the pre-test because such differences occur with intact groups which keep the participants in natural settings and allow a higher degree of external validity (Dimitrov & Rumrill, 2003).

4. Results

The pre-test scores (mean) of children with mild intellectual disabilities were higher than children with moderate intellectual disabilities in both experimental and control group (Figs. 1 and 2) which indicated that children with mild intellectual disabilities had better listening and speaking skills (language skills) than children with moderate intellectual disabilities. The post-test scores (mean) of the experimental group are higher than the post-test scores of the control group among the children with mild intellectual disabilities (Fig. 1). Similar results were found among children with moderate intellectual disabilities on their listening and speaking skills (Fig. 2).
Table 3. – Summary of ANCOVA of listening and speaking skills by considering pre-skill behaviour as a covariate.

<table>
<thead>
<tr>
<th>Type of Disability</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>1528.425</td>
<td>1</td>
<td>1528.425</td>
<td>118.401*</td>
<td>.000</td>
<td>.887</td>
</tr>
<tr>
<td>Error</td>
<td>464.721</td>
<td>36</td>
<td>12.909</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>34.225</td>
<td>1</td>
<td>34.225</td>
<td>71.789*</td>
<td>.000</td>
<td>.878</td>
</tr>
<tr>
<td>Error</td>
<td>4.767</td>
<td>10</td>
<td>.477</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * Significant at 0.01 level.
Results of Analysis of Covariance of children with mild intellectual disabilities in Table 3 indicated that adjusted $F (1, 36) = 118.401, p = .000$ which is significant at .01 level with $df = 1/36$ which indicated that adjusted mean scores of listening and speaking skills of experimental and control group differ significantly by considering Pre-listening and speaking skill behaviour as a covariate. Further, the adjusted mean scores of listening and speaking skills of the experimental group was 102.739, is significantly higher than that of the control group whose adjusted mean score of listening and speaking skills was 88.652. To compare the adjusted mean scores of listening and speaking skills of experimental and control group children with moderate intellectual disabilities by considering Pre-listening and speaking skill behaviour as a covariate. Results in Table 3 shows that adjusted $F (1, 10) = 71.789, p = .000$ which is significant at 0.01 level with $df = 1/10$ which indicated that adjusted mean scores of listening and speaking skills
of experimental and control group differ significantly by considering Pre-listening and speaking skills behaviour as a covariate. Further, the adjusted mean score of listening and speaking skills of the experimental group was 76.518, which is significantly higher than that of the control group whose adjusted mean score of listening and speaking skills was 72.556. These results answered the first research question that there is a significant effect of teaching listening and speaking skills on the children with mild and moderate intellectual disabilities using communicative language teaching approach and teaching strategies from Applied Behaviour Analysis.

Since a significant difference was found in the adjusted mean scores of listening and speaking skills of control and experimental group, the effect size was also calculated. The effect size for an intervention in teaching listening and speaking skills using communicative language teaching approach on the children with mild intellectual disabilities was .887 and for the children with moderate intellectual disabilities, it was .878 which indicated a large effect size. It was found that the effect of the intervention was large in both the children with mild and moderate intellectual disabilities. This result answers the second research question and it can be concluded that the effect size of the intervention in teaching listening and speaking skills on the children with mild intellectual disabilities was not higher than children with moderate intellectual disabilities.

5. Discussion

In the current research, intervention in teaching listening and speaking skills using communicative language teaching approach and teaching strategies adopted from Applied Behaviour Analysis was designed and tested on the children with mild and moderate intellectual disabilities. Non-randomized pre-test post-test control group design was used in quasi-experimental research. Findings suggested that there is a significant effect of an intervention in teaching listening and speaking skills using communicative language teaching approach and teaching strategies adopted from Applied Behaviour Analysis on the children with mild and moderate intellectual disabilities.

There is little evidence-based research in the intervention in the listening and speaking skills of the children with intellectual disabilities in India but in the western literature, there are studies supporting the current research which are discussed here. Kauffman (2009) concluded that direct, systematic instruction in reading is the most effective approach to teaching students with intellectual disabilities. He strongly suggested
that special and general education cannot be equal and therefore, the fundamental concern is that students with intellectual disabilities should be respected and taught all they can learn. Stuebing, Barth, Molfese, Weiss and Fletcher (2009) concluded that intelligence has a moderate correlation with achievement, but this does not translate to a conceptual model in which IQ is a robust determinant or cause of achievement. Both academically and emotionally, literacy has the potential to significantly add to the quality of life of individuals with intellectual disabilities which contribute towards the development of skills in problem-solving, choice-making and communication (Ashman & Suttie, 1995; Van den Bos et al., 2007).

The experimentally accessible population and the target population (other Indian states and developing countries) have certain similar characteristics as intelligence, associated problems due to intellectual disability, geographic (rural and urban area), socio-economic status, cultural and political environment. Therefore, the findings of the current research could be replicated in other Indian states and the results can also be generalized. Moreover, due consideration was given to experimental arrangement as there was no ‘interaction effect’ due to the single intervention, rare chances of ‘Hawthorne effect’ and little chances of alteration of post-test scores due to pre-testing by the children with intellectual disabilities in the experimental groups.

5.1. Implications and suggestions

The communicative language teaching approach is a practical approach to improve listening and speaking skills among children with mild and moderate intellectual disabilities. The strategies from Applied Behaviour Analysis teaching made the implementation of this approach feasible for the teachers. The teachers were flexible as per individualistic needs of each child depending upon their disability. Although few children required additional practice to learn the skills, the majority of the children learned the skills in time as planned in the intervention module. Since this intervention was designed for children with mild and moderate intellectual disabilities, therefore, it can be adopted as guidelines for teaching listening and speaking skills at Indian special schools. To obtain the desired results, the teachers should be trained to implement the intervention as planned in the module (teaching strategies, communicative language teaching approach, listening and speaking skills, and time schedule). To plan curriculum-related policies and programmes to effectively address issues related to the education of these children, the results of the current research shall be helpful in the
planning for special education of the children with intellectual disabilities. For the children in an inclusive setting, the research results and module for intervention in listening and speaking skills in the current research can also be helpful. Future researchers should replicate the findings of current research by planning different listening and speaking skills and measuring them with scales having strong psychometric properties.

5.2. Limitations

Research results should be considered in light of potential limitations. A noisy environment, the severity of the disability, maturation, teacher’s perception of a particular child, the home environment could have influenced the research results. The study was not conducted on children with severe and profound intellectual disability due to their poor listening and speaking skills. It was difficult to motivate a few children who were not interested to learn despite sincere efforts by the teachers. Establishing rapport and a positive relationship with students may affect the response to the intervention (Meadan & Mason, 2007). It was also observed that the children performed better when the teacher was known to them which might have influenced the results. The children were not at all enthusiastic to adopt these listening and speaking skills into their daily routine after the completion of the intervention. Moreover, there was no follow-up after the post-test.

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References


RIASSUNTO

Un intervento didattico centrato sullo sviluppo delle abilità di ascolto e conversazione è stato condotto nella presente indagine quasi sperimentale usando l’approccio comunicativo dell’insegnamento delle lingue e le strategie di insegnamento basate sull’analisi applicata del comportamento. È stato allestito un gruppo di controllo non randomizzato per il confronto pre-test post-test. Sono stati inseriti in gruppi sperimentali e di controllo di cinque scuole speciali del distretto di Jammu in J&K. BASIC-MR, cinquantadue bambini con disabilità intellettive lievi o moderate soddisfacenti criteri inclusivi ed esclusivi ed è stato somministrato ad entrambi i gruppi, come pre-test e post-test, uno strumento validato. I bambini appartenenti ai gruppi sperimentali sono stati formati alle capacità di ascolto e conversazione usando l’approccio comunicativo all’insegnamento della lingua. L’analisi ANCOVA ha indicato risultati significativi dell’intervento didattico fornito sia per i bambini con disabilità intellettive lievi – \( F(1, 28) = 118.401, p = .000 \) – sia per i bambini con disabilità intellettive moderate – \( F(1, 32) = 77.789, p = .000 \). L’intervento si è mostrato quindi efficace per lo sviluppo delle capacità di ascolto e conversazione dei bambini con disabilità intellettive lievi e moderate.

Parole chiave: Approccio comunicativo all’insegnamento delle lingue; Ascolto; Conversazione; Disabilità intellettuali; Intervento.