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Types of Communication in Kinetotherapy Classes Involving Students with Hearing Impairments

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Abstract

A significant role in kinesiology classes involving students suffering from hearing impairments is played by communication with these students. The aim is to improve their communication skills, encouraging them to use the best mode of communication, creating the opportunities for socialization and for the integration process (games, physical therapy lesson, and others). The role of the teacher is to transmit knowledge to pupils in a specific language. Due to the particularities of the pupils, the verbal communication in class may be accompanied by nonverbal communication, visual and symbols. Expressive didactic communication involves such elements as the teacher’s attitude, way of dressing and motor behavior, facial expression, use of certain gestures, symbols or video, as well as use of permanent eye contact with students throughout classes. This research aims at highlighting the types of communication (verbal, nonverbal, visual and symbols) that may significance contribute to an effective communication in kinesiology classes.

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Keywords: communication, hearing impaired, kinesiology;

1. Introduction

"In the last decades, learning the language, began to be seen more often in terms of communication. The language allows, above all, the exchange of information and emotional subject with others, or to himself, the purpose being superior adaptation. (Mitrache and Tudos, 2004). The Palo Alto school, founded by Gregory Bateson and Paul Watzlawizk, has a great influence on the analysis and explain the communication process,

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Based on communication meaning is to "put together". This school is based on the finding that the relationship of communication shall be non-linear, unidirectional, but very interactive with unpredictable trajectories.

Didactic communication is a particular form of human communication, and it is indispensable in the circulation systematic learning of specific content. It has several features that distinguish it from other forms of interpersonal communication. It runs between two or more agents: teachers and students, with the common goal of their training, using verbal, written, non-verbal, paraverbal and visual, especially combined form.

Didactic communication is through its specificity, a predominantly verbal form of communication that dominates the activity of teaching – learning. This reflects, in the same extent, the skills of school programs, the transmitter qualities (usually the teacher) and the receiver qualities (usually students).

The main types of communication are verbal, paraverbal and nonverbal.

The elements of didactic communication are the following:

- didactic message issued by the teacher or another source of information;
- the channel transmitting the message;
- reception of the message by students;
- storage and processing the message in order to take decisions (responding to the student, corrections or additions by the teacher).

In the teacher-student interaction, pedagogical communication performs several functions: informative, for transmission the didactic and educational message; formative function, to stimulate thinking and imagination at students; the educational function of transmission of educational influences, cohesion and affirmation of school groups, the function of evaluation and adjustment of teaching – learning process, function to solve educational problems and school conflicts.

"... pedagogical research has addressed more extensive communication, as in other fields (linguistics, psychology, rhetoric, sociology, computer science, mass media), tending to communicate the pedagogy of communication, especially in the teaching plan." (Joita, 2000),

Hypoacusis is diminishing of hearing capacity. If the hearing capacity is greatly reduced or completely disappeared, we can talk about deafness. Hearing is essential for the harmonious development of children's language. Therefore, the level of hearing loss will disturb more or less the level of communication and language development and social integration of the child.

"As a form of didactic communication, teaching consists in an operating system of selection, arrangement and adequacy, of the content thinking of students, and transmission of information using specific teaching strategies in order to achieve with maximum efficiency the proposed targets." (Stoica, 1999)

Several authors have researched the communication of children with disabilities, among which: Stănică, Popa, Popovici, Rozorea and Muşu, 1997; Schmitt, 1997; Vrâşmaş and Stanică, 1997; Verza and Păun (coord), 1998; Ungureanu, 1998; Radu & Popovici, 1999; Vrâşmaş, 2007. The present research comes to support the teachers physical education and kinesiology and comprises a parallel between the types of communication used by teachers during classes and and categories of deficiencies regarding the assimilation of the driving movements and the correctness execution.

2. Research Hypothesis

In the kinetotherapy lesson, effective communication between teacher and students with hearing impairment contribute to shortening the learning. Also, the use of multiple types of communication in the kinetotherapy lesson leads to more robust and faster learning of provided informations.
3. Research methods

According to the research hypothesis and objectives for this study, we opted for a qualitative approach and the quantitative one to emphasize communication capability and understanding of hearing impaired and deaf students. We recorded the execution faults in a sequence of elements during the kinesiology hours.

As research methods we used: study of literature, the experiment, mathematical statistic interpretation (the arithmetic average, percent) and graphics. It's a research finding.

4. Research organization

The experiment was conducted on a number of 15 students from the School for Hearing No. 2 “St. Mary” of Bucharest. Of the total of 15 students, 7 shows the hearing loss and 8 are deaf. The students are from grades sixth, seventh and eighth and have a normal IQ.

The teacher showed students a number of elements of gymnastics with the connection between them. The teacher has appealed to three types of communication: verbal communication (verbal form, the teacher described the elements of gymnastics and the connection between them), visual communication (form of nonverbal communication that allowed watching the videotaped demonstration and the demonstration performed by teacher) and the mimic signs and gestures - sign language (teacher used a form of speech and natural gestures that establish a channel of communication with the student).

5. The presentation and the processing research

<table>
<thead>
<tr>
<th>Items targeted</th>
<th>Verbal Communication (VeC)</th>
<th>Visual Communication (ViC)</th>
<th>Using sign language and gestures (SLG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Wrong</td>
<td>Correct</td>
</tr>
<tr>
<td>1. Position of palms</td>
<td>6</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>2. Pronounced bending head</td>
<td>7</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>3. Arching vertebral column</td>
<td>8</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>4. Momentum feet</td>
<td>6</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>5. Rolling on the back</td>
<td>10</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>6. The position of the lifting arms in distant</td>
<td>2</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>7. The position with legs apart</td>
<td>0</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>8. Placing palms on hips correctly</td>
<td>12</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>9. Jumping up with legs</td>
<td>5</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>10. The position of verticality of the body</td>
<td>2</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>11. Settlement knee</td>
<td>6</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>12. Balance position on one knee</td>
<td>2</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>13. Hold 3 seconds.</td>
<td>2</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>14. Easy exten of the head</td>
<td>1</td>
<td>14</td>
<td>2</td>
</tr>
</tbody>
</table>
Regarding oral communication (see Table 1), of the 15 items targeted, only 3 of them were recorded higher values in correct executions. In the other 12 there were many mistakes in execution. Most students were wrong in exercises of fine motion and the transition from one element to another. For example, the items 6, 7, 10, 12, 13, 14 and 15.

Using visual communication (see Table 1) by watching the videotaped demonstration and the demonstration performed by teacher has demonstrated that deaf students recorded mistakes in executions to 6 items from the 15 recorded (7, 10, 12, 13, 14, 15).

Regarding communication using sign language (see Table 1), all of the 15 items have been higher values at the correct executions than the wrong executions.

Table 2. Registration of performances to students with hearing impaired and deaf students in the types of communication

<table>
<thead>
<tr>
<th>Categories</th>
<th>Verbal Communication (VeC)</th>
<th>Visual Communication (ViC)</th>
<th>Using sign language and gestures (SLG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct</td>
<td>Wrong</td>
<td>Correct</td>
</tr>
<tr>
<td>Students with hearing impaired</td>
<td>44.7%</td>
<td>55.3%</td>
<td>60%</td>
</tr>
<tr>
<td>Deaf students</td>
<td>20%</td>
<td>80%</td>
<td>70.5%</td>
</tr>
</tbody>
</table>

Fig. 1 Verbal communication to students with hearing impaired and deaf students
1. students with hearing impaired (a. correct, b. wrong)  2. deaf students (a. correct, b. wrong)

Regarding verbal communication (see Fig. 1), only 20% of deaf students achieved correct executions after the teacher explained the execution of the exercise, while 80% had errors of execution. At the students with hearing impaired, the ratio is almost equal.

It was found that although students read correctly labially, they do not fully understand the words “read from the lips”. Most focus on the requirements of coarse execution without taking into account the details of execution. For example, at rolling exercise, the students did not understand what kind of rolling were requested to execute.
When standing on the shoulder blades, they did not have a correct representation of execution and less so keeping the torso upright during the execution. At the balance position on one knee, the students did not understand which is the final position in the balance. From records, the students with hearing impaired retain, from a sentence or phrase, just words "key" without attention to detail.

As a result of using in the lesson a visual communication (see Fig. 2), we can see an increase in the number of correct executions both, the deaf students and students with hearing impaired. Because the motor visual memory is well developed, the execution was greatly improved after teacher demonstration. However, the students with hearing impaired not focuses on the purpose of execution. The element that registered the highest number of wrong executions was balance position on one knee. This is explained by the fact that students with hearing impairment have a weak balance.

As a result of using the sign language and gestures (see Fig. no. 3), we can see a significant reduction in the number of mistakes made both, the deaf students and students with hearing impaired. However, the number of
correct executions is greater at deaf (90%) compared to the hearing impaired (77%). It is explained that they mainly use this form of communication. However there is a great desire of students to complete the exercise at the expense of quality executions.

6. Conclusions

With hearing impaired students, the communication must be understood as a psychosocial process of influence of attitudes and behaviors through specific languages. During the kinetotherapy lesson, learning is done mainly using nonverbal communication, visual communication, teacher demonstrations and sign language and gestures.

Communication between teacher and students with hearing impairments aims to improve the communication skills of students. Also, using the best mode of communication during lessons is in relation to the degree of their impairment. The specific message of didactic communication must have an explanatory-demonstrative dimension and must be sent to students by using appropriate teaching strategies to develop their intellect, depending on their type of disability and level of knowledge, in order to be understood by students and achieve a more robust and faster assimilation of the learning content. In this case, the results of research complete and sustain teaching technology elements of lessons taught by students or teachers of kinesiology and physical education regarding on the effectiveness of types of communication in this category of deficiencies.

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