52 - EVALUATION PSICOMOTORA IN CHILDREN WITH AUDITORY COMPROMISING SUBMITTED TO THE TEACHING OF POUNDS

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INTRODUCTION

The LIBRAS (Brazilian sign language) used by individuals with hearing compromises, is recognized by Law 10436/2002 and Decree 5626/2005. It grows in space built with visual articulators: the hands, the body, the movements, the rhythm and the area of signaling. The language of signs in the U.S. started the 50's, through a description realized by William Stokoe, published in 1965. In Brazil, the LIBRAS had acquisition in the 90s (QUADROS, 2006).

The psychomotricity is the science of the human movement in its entirety, body, mind and its relations with the environment. According Gallahue and Ozmum (2001), the individual becomes, then, able to transform images into action through the intentional movement, with bases internalized psychological, resulting from its capabilities biopsychosocial, the movement is integrated and organized.

According to Oliveira (2002), the psychomotricity is being good about it, aware of their reality body, expressing itself in its entirety. The Libras (Brazilian Sign Language) is recognized as a legal means of communication and expression between the communities of deaf people in Brazil.

The search was to focus the teaching of Libras as an adjunct psychomotor development in children with hearing impairment enrolled in public schools and state and municipal. Participated of this study, 32 students diagnosed with hearing impairment, from both genders, 17 men and 15 women. The type of search or the search feature is experimental to test applied to a single group, previously defined as the fundamental characteristics (CAMPBELL, STANLEY, 1979). The student was referred to psychomotor evaluation by the Protocol of Psychomotor Battery (BPM), prepared by Fonseca (1995), which is the measurement of 7 psychomotor factors: tonus, Balancing, lateralization, Concept of the body, Structuring Space-Time, Global Praxis and Fine Praxis, which are divided into 24 subfactores / tasks performed by children at the beginning of the academic period and another applied in June 2008, totaling 72 classes of teaching LIBRAS.

OBJECTIVE

The aim of this study was to evaluate the psychomotor level before and after 72 classes of LIBRAS - Brazilian sign language in hearing impaired students with compromises, accompanied by interpreters of public schools, trying to characterize the psychomotor development with the teaching of LIBRAS.

METHODOLOGY

The sample for this study consisted of 32 children with hearing compromises, both genders being 13 men and 19 women, aged from 07 to 16 years, which were selected, so intentionally, in the universe enrolled in public schools state and municipal accompanied by an interpreter of Libras, who presented the following criteria:

1.medical diagnosis stating they have hearing impairment;

2.individuals without the field of Brazilian Sign Language (pounds);

3.attendance and punctuality in the monitoring;

4. Signature of the responsible expiry of free and informed consent, specifying the objectives and methodology of work, according to Resolution 196/96 of the National Board of Health

The proposed study was approved by the ethics committee of the Anhanguera Educational, being held in state and municipal public schools, in the year 2008, totaling 72 classes of pounds. The volunteers were subjected to five consultations per week, with duration of 50 minutes each. After the signature of the representatives of the administrative units school children and their parents or guardians of a consent form, children were assessed in time in a private room of the school, accompanied by the interpreter of pounds and another representative of the school unit, we put the materials suitable for type of assessment used, such as balls, small cones, drum to feel vibration, colored ribbons, tapes, papers and pens. The tasks were previously explained to the kids and calm them feel safe, achieve them within the parameters required, respecting all legal and ethical aspects of Resolution 196/96 which deals with research involving humans.

The volunteers were subjected to the evaluation instrument psychomotor (BPM) developed by Fonseca (1995). It was operated by a physiotherapist, without experience in U.S. dollars, accompanied by interpreters of Brazilian Sign Language (Libras), in their school units of the network of State and Municipal Education, properly instructed not to interfere in the ratings and was not involved in this research. Each psychomotor evaluation was performed by the same professional before and after teaching of Libras.

The method of evaluating BPM (Psychomotor Battery) developed and validated by Fonseca (1995), is a standardized instrument of observation, set up to measure, objectively, the movements that occur in psychomotor functions. The BPM is made up of seven psychomotor factors: tone, balancing, lateralization, the body concept, structuring space-time, global praxis and fine praxis, divided in 24 subfactores, and graduated to a scale of 4 points like this: 1 - apraxis -- movement with achievement imperfect, incomplete and disorganized; 2 - dyspraxis - with difficulty in achieving control of the movement; 3 - Eupráxico - with movement and conduct controlled properly, 4 - Hiperpráxico - perfectly with movement, harmoniously and well controlled, based on quality and number of movements executed. The scores of each subfactor is added and divided by total (all subfactores) within each factor alcohol (FONSECA, 1995).

For the statistical analysis was used a procedure described as frequencies with the aim so percentual to quantify the occurrence of scoring in each period (pre and post) teaching of Libras. It was also carried out the Wilcoxon nonparametric test to identify whether there were significant differences ($p < 0.05$) between the scores of scores in the two periods, namely the value of "p", represents the difference between the first and second evaluation .

The choice of a statistical parametric not made because the data are qualitative and thus do not show a normal distribution. In implementing these procedures was used SPSS (statistical program for the social sciences) for Windows, version 10.0.

All results are due exclusively to the psychomotor development after the teaching of Libras, as a result, the students said that their children did not have another type of monitoring that is stimulating the motor or psychological actions during the study period.

DEVELOPMENT

The Brazilian sign language used by individuals with hearing compromises, it develops in space built with visual articulators: the hands, the body, the movements, the pace and the area of signaling. The language of signs in the U.S. started the 50's, through a description held by William Stokoe, published in 1965. In Brazil, the pound had its acquisition in the 90s (QUADROS, 2006). According Quadros (2006), the professionalization of translators and interpreters of sign language of made from volunteer activities that were being valued as labor activities. The participation of individuals with hearing compromises in the discussions is to ensure social security and accessibility in various institutions of professional interpreters of sign-language, acting in the processes of communication, especially in educational environments.

For Oliveira (2002) to psychomotricity is a means of providing the child's development ahead of their difficulties, allowing the full expression of reality and assuming its body. Not only does it enrich the psychomotricity hand, but if observed the stages of child development, it is essential the base for learning (LE BOULCH, 1987).

Factor psychomotor tone or muscle tone is a state of muscle tension that keeps the body ready for immediate responses to stimuli (BURGOS, 2006). Rosa Neto (2002) relates to the tone and mind set that tone is a way of living person, family, society.

The balance is maintained according to the vestibular system, located in the inner ear. It is sensitive to all movements of the head and eyes. On receiving stimuli from the change of direction, sends them to the central nervous system (CNS), the cerebellum, the vestibular nuclei in the brainstem, the center oculomotor and spinal cord that control the movements of the head and limbs. This mechanism leads to the perception of acceleration and deceleration (POWERS; HOWELEY, 2000).

The notions of the body make the distinction between the words: body awareness, body image and body scheme. The child perceives your body when you have anatomical knowledge, knowing where each party is located, both in itself, as in other, is the perception body. From the moment that the body carries out activities of daily life, so responsible, through awareness of how to do, is defined as the body schema (GALLAHUE; OZMUM, 2003).

According to Furtado (2004), the spatial structure is closely linked to the environment of child development, it is essential that the child try his body in its full potential, expressing themselves through it so freely and in stimulating universe. The lateral and the natural propensity of human beings for the greater use of a side of the body. This definition occurs within the individual shows great skill in the execution of movements by foot, eye, hand on the left or right. Notions of right and left are related to body scheme, your child may be defined laterally and not differentiate them (REZENDE et al. 2003).

The praxis or global and fine motor coordination is of fundamental importance for understanding of child development in that it shows the magnitude with communication, extrapolating the oral language, revealing the child's feelings and thoughts. Through the body, it shows their affection, their intelligence (ROSA NETO, 2002). The fine motor coordination includes the manipulation of objects with the joint action of the manual drive, the vision and focus on the gesture that is running (REZENDE et al. 2003).

RESULTS

The tables below provide general comments and dimensions of the results assessed

TABLE 1. COMPARISON BETWEEN the percentage of occurrence PRE AND POST TREATMENT OF SLAG RELATED TO ENPHASIS AND BALANCE

Tabela 1. Comparação entre o percentual de ocorrência pré e pós tratamento de escores relacionados à tonicidade e ao equilíbrio.

	Freqüência (n = 32)					
Classificação	A1	A2	p	B1	B2	p
1,0						
2,0	28,1	18,8	0,021	9,4	3,1	0,02
3,0	40,6	34,4		18,8	9,4	
4,0	31,3	46,9		71,9	87,5	

Onde: p = significância; A = tonicidade nos momentos 1 e 2; B = equilíbrio nos momentos 1 e 2.

Tabela 2. Comparação entre o percentual de ocorrência pré e pós tratamento de escores relacionados à lateralização e à noção corporal.

	Freqüência (n = 32)					
Classificação	C1	C2	p	D1	D2	p
1,0						
2,0			0,083	9,4	6,3	0,02
3,0	62,5	53,1		78,1	62,5	
4,0	37,5	46,9		12,5	31,1	

Onde: p = significância; C = lateralização nos momentos 1 e 2; D = noção corporal nos momentos 1 e 2.

TABLE 2. COMPARISON BETWEEN the percentage of occurrence PRE AND POST TREATMENT OF SLAG RELATED TO LATERALIZATION AND CONCEPT BODY

Tabela 3. Comparação entre o percentual de ocorrência pré e pós tratamento de escores relacionados à estruturação espaço/temporal, à praxia global e à praxia fina.

	Freqüência (n = 32)								
Classificação	E1	E2	p	F1	F2	p	G1	G2	p
1,0									
2,0	9,4	9,4	0,034	21,9	9,4	0,0005	28,1	9,4	0,0005
3,0	46,9	28,1		50,0	31,3		53,1	31,3	
4,0	43,8	62,5		28,1	59,4		18,8	59,5	

Onde: p = significância; E = estruturação espaço/temporal nos momentos 1 e 2; F = praxia global nos momentos 1 e 2; G = praxia fina nos momentos 1 e 2.

TABLE3. COMPARISON BETWEEN the percentage of occurrence PRE AND POST TREATMENT OF SLAG RELATED TO SPACE-TIME, GLOBAL PRAXIS AND FINE PRAXIS

The results of this study may see a significant improvement in rating F and G, which corresponds to the items of Global Praxis, Fine Praxis and the movements, being found in these ratings-driving activities skilful hand, if well structured methodologically, is a potential ally to the ripening psychomotor child.

Our results are consistent with the assertions of Rosa Neto (2002) to drive overall is of fundamental importance for understanding of child development in that it shows the magnitude with communication, extrapolating the oral language, revealing the child's feelings and thoughts. Through the body, it shows their affection, their intelligence.

The fine motor coordination includes the manipulation of objects with the joint action of the manual drive, the vision and focus on the gesture that is running (REZENDE et al. 2003).

The tone, which indicates the muscle tone, has a key role in motor development, she ensures the attitudes, the posture, to mimic the emotions, from which emerge all human motor activities. In this area Psychomotor children had a significant improvement (p = 0021). According to Furtado (2004), the child's education should highlight the link through the movement of his body, taking into account the muscle tone, their age, culture body and its interests.

The balance comprises a static set of skills (no movement) and dynamic (in motion), covering the postural control of acquisitions

and development of locomotion. The static equilibrium is characterized by the kind of balance achieved in a certain position, or to provide the ability to maintain a certain posture on base. In this area the children had a small significant improvement (p = 0.02).

The body laterality refers to the internal area of the individual, enabling him to use a part of the body with greater aplomb. What usually happens is the confusion of laterality with the notion of right and left, that this body involved with the scheme. In this study, children not been a significant improvement (p = 0083). Burgos (2006) referred children with or without cross laterality and learning disabilities with a program of physical exercise and following a review, found improvement in the definition of laterality of these children, however, found no effect on school performance.

The formation of the "I", that is, the personality, includes the development of the notion or outline body, through which the child takes his body and aware of the opportunities to express themselves through it. In this area Psychomotor these children showed little significant improvement (p = 0.02). According Burgos (2006), since 1987 the body scheme is the basic element indispensable for the formation of the personality of the child, taking a different representation of its own scientific body.

The structuring space-time arises as functional organization of laterality and body concept, since it is necessary to develop spatial awareness inside the body before designing the benchmark somatognósico in outer space (FONSECA, 1995). Here the children also showed a significant change (p = 0034).

The global praxis has by definition the ability to make the move voluntary pre-established way of achieving a purpouse. After the teaching of Libras for children had a significant improvement (p = 0.0005), we observed that individuals with hearing compromises with this profile needs to be further stimulated continuously, thus providing for improvements in the achievement of the movement.

The fine praxis includes all fine motor tasks, which combines the function of coordinating the movements of the eyes during the fixing of attention, as well as cover the functions of planning, regulation and verification of tense activities. This study also obtained significant improvement in fine praxis (p = 0.0005). In a study of children from 8 to 10 years of age on psychomotor profile of children in a program of sports, Burgos (2006) found increases in the average of all structures psychomotor evaluated, resulting in a significant gain in overall average compared before and after.

FINALCONSIDERATIONS

The results showed after 72 classes of Libras significant increase of almost all psychomotor factors evaluated in 32 children accompanied by interpreters of sign language in public schools, trying to characterize the psychomotor development with the teaching of Libras. One can suggest that the teaching of Libras in question influenced in positive ways the psychomotor development of children, concluding that the routine activities of skilful-driving, as long as methodologically well-structured, is a potential ally to the ripening psychomotor child.

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EVALUATION PSICOMOTORA IN CHILDREN WITH AUDITORY COMPROMISING SUBMITTED TO THE TEACHING OF POUNDS

ABSTRACT

The research had as approach the education of LIBRAS (Brazilian Language of Signals) as main factor in the psicomotor development in children with auditory deficience of state and municipal public schools. Molinari (2003), affirms that the psicomotricity is the union between emotion, affectivity, body and mind becoming related by means of the action. The act to interpret involves cognitives and linguistic actions, is a process where the interpreter is completely involved in the interaction, ahead of people who present specific communicative intentions (Quadros, 2006). They participate of the present study, 32 pupils, of both the sorts. Evaluations had been made (daily pay and to after) lessons of LIBRAS, using the protocol of Battery "Psicomotora" (BPM), elaborated for Fonseca (1995) The results had been: in the factor A - Tonicidade, the pupils had gotten a significant improvement (p=0,021). In factor B - Balance, the pupils had a satisfactory improvement (p=0,02), a time who found difficulties in this factor. In factor C - Lateralidade, children had not gotten a significant improvement (p=0,083). In factor D - Corporal Notion, the pupils had presented satisfactory corporal evolution (p=0,02). In the factor and - Estruturação space-weather the pupils had gotten significant improvement (p=0,034). In factor F - Global Praxia, the pupils had gotten functional profit in relation its motor independence (p=0,0,0005). In factor G - Fine Praxia, the pupils had gotten a bigger profit (p=0,0,0005). He concludes yourself that the results had pointed 72 lessons of LIBRAS after significant increase of almost all the factors evaluated psicomotores, in 32 pupils folloied for interpreters of the language of signals in public schools. .

Key-Words: Auditory Deficience; Brazilian Language of Signals; Psicomotricity.

ÉVALUATION PSYCHOMOTEUR DES ENFANTS AYANT UNE PERTE AUDITIVE QUI ÉTUDIENT LA LANGUE DES SIGNES BRÉSILIEN

RÉSUMÉ

La recherche a été d'axer l'enseignement de LIBRAS- brésilien en langue des signes comme un prolongement du développement psychomoteur chez les enfants atteints de déficience auditive de l'État et les écoles publiques locales.

Molinari (2003), indique que la psychomotricité est l'union entre l'émotion, l'affection, qui relie le corps et l'esprit est par l'action. L'acte de l'interprétation implique cognitif et linguistique des actions, est un processus dans lequel l'interprète est pleinement impliquée dans

l'interaction, en face de personnes qui ont des intentions de communication (Quadros, 2006).Participe de cette étude, 32 étudiants des deux sexes. Nous avons évalué (avant et après) Classes des LIBRAS en utilisant le protocole de psychomotrice (BPM), établi par Fonseca (1995). Les résultats en ont été le facteur A - tonicité, les élèves a obtenu une amélioration significative (p = 0021). Dans facteur B - Balance, les étudiants ont une bonne amélioration (p = 0,02), car ils avant trouvé des difficultés dans ce facteur. Dans le facteur C - La latéralité, les non enfants pas u une amélioration significative (p = 0083). Dans le facteur D - Concept corps, les étudiants ont montré développement satisfaisant du corps (p = 0,02). Et facteur de - Structurer l'espace-temps des étudiants une amélioration significative (p = 0034).Dans le facteur F - Praxis global, les étudiants ont reussi avaient avore une fonction acquérir leur indépendance motrice (p = 0,0,0005). Facteur G praxis fine, les étudiants ont eu un gain plus élevé (p = 0,0,0005). Il a été conclu que les résultats ont montré après 72 e túde de LIBRAS augmentation significative de presque tous les facteurs psycho-évalués, dans 32 étudiants accompagnés par des interprètes de la langue des signes dans les écoles publiques.

Mots clés: Déficience auditive ; brésilien langue des signes; Psicomotricidade.

EVALUACIÓN PSICOMOTORA EN NIÑOS CON DISCAPACIDAD AUDITIVA SOMETIDAS A LA ENSEÑANZA DE LENGUA BRASILEÑA DE SEÑAS

RESUMEN

La investigación se centró la enseñanza de LIBRAS _lengua brasileña e señas como coadyuvante en el desarrollo psicomotor en niños con discapacidad auditiva de escuelas públicas estatales y municipales. Molinari (2003) afirma que la psicomotricidad es la unión entre emoción, afectividad, cuerpo y mente relacionandose por medio de la acción. El acto de interpretar involucra acciones cognitivas y lingüísticas, es un proceso en el que el intérprete está completamente involucrado en la interacción, delante de personas que presentan intenciones comunicativas específicas (Quadros 2006) Participan del presente estudio 32 alumnos de ambos géneros. Fueron hechas evaluaciones (antes y después) de las clases de Libras, utilizando el protocolo de Bateria Psicomotriz (BPM) elaborado por Fonseca (1995). Los resultados fueron: En el factor A - Tonicidad, los alumnos obtuvieron una mejoría significativa (p=0,021). En el factor B - Equilibrio los alumnos tuvieron una mejoría satisfactoria (p=0,02)pues se encontraron dificultades en este factor. En el factor C- Lateralidad, los niños no obtuvieron una mejoría significativa (p=0,083). En el factor D- Noción Corporal, los alumnos presentaron un desarrollo corporal satisfactorio(p=0,02). En el factor E- Estructuración Espacio-Tiempo, los alumnos obtuvieron mejoría significativa (p=0,034). En el factor F- Praxis Global, los alumnos obtuvieron un incremento funcional con relación a su independencia motora (p=0,0,0005).En el factor G- Praxis Fina, los alumnos obtuvieron un mayor incremento (0,0,0005). Se llegó a la conclusion que los resultados mostraron que, después de 72 clases de Libras un aumento significativo en casi todos los factores psicomotores evaluados, en 32 alumnos acompañados por intérpretes de la lengua de señas en escuelas públicas.

Palabras Claves: Discapacidad auditiva; Lengua Brasileña de Señas; Psicomotricidad

AVALIAÇÃO PSICOMOTORA EM CRIANÇAS COM COMPROMETIMENTO AUDITIVO SUBMETIDAS AO ENSINO DE LIBRAS

RESUMO

A pesquisa teve como enfoque o ensino de LIBRAS- língua brasileira de sinais como coadjuvante no desenvolvimento psicomotor em crianças com comprometimento auditivo de escolas públicas estaduais e municipais. Molinari (2003), afirma que a psicomotricidade é a união entre emoção, afetividade, corpo e mente relacionando-se por meio da ação. O ato de interpretar envolve ações cognitivas e lingüísticas, é um processo em que o intérprete está completamente envolvido na interação, diante de pessoas que apresentam intenções comunicativas específicas (Quadros, 2006). Participam do presente estudo, 32 alunos, de ambos os gêneros. Foram feitas avaliações (pré e pós) aulas de Libras, utilizando o protocolo de Bateria Psicomotora (BPM), elaborado por Fonseca (1995). Os resultados foram: no fator A Tonicidade, os alunos obtiveram uma melhora significativa (p=0,021). No fator B Equilíbrio, os alunos tiveram uma melhora satisfatória (p=0,02), uma vez que encontravam dificuldades neste fator. No fator C Lateralidade, crianças não obtiveram uma melhora significativa (p=0,083). No fator D Noção Corporal, os alunos apresentaram evolução corporal satisfatória (p=0,02). No fator E Estruturação espaço-temporal os alunos obtiveram melhora significativa (p=0,034). No fator F - Praxia Global, os alunos obtiveram ganho funcional em relação a sua independência motora (p=0,0,0005). No fator G- Praxia Fina, os alunos obtiveram um maior ganho (p=0,0,0005). Conclui-se que os resultados apontaram após 72 aulas de Libras aumento significativo de quase todas os fatores psicomotores avaliados, em 32 alunos acompanhados por intérpretes da língua de sinais em escolas públicas.

Palavras chave: Comprometimento Auditivo; Língua Brasileira de Sinais; Psicomotricidade.