

158 - SCHOOL PERFORMANCE – EVALUATION OF CHILDREN FROM 1ST TO 4TH SCHOOL LEVEL AT QUILOMBOLA COMMUNITIES IN THE STATE OF AMAPÁ

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INTRODUCTION

The period for formal learning begins with the acquisition of basic skills like reading, writing and calculus. All the other skills to be incorporated later will be based on the previous ones (Nunes, 1995). This way and specially from this moment on, the school place starts to be the privileged space for learning (Soares, 2009).

It is common for the children to face problems of different nature in the first school years. In this period, there is a wide range of internal inside and outside factors, both from the individual himself and from the school or its environment, able to interfere in the learning process and become obstacles to the integration of thinking, feeling, speaking, listening and acting. It is in the classroom where the difficulties for learning come out, and they become, this was, very common to be a laboratory for investigation and tests for learning assessment and even for intervention practices (Greene, 1995; Ervin et al., 1998).

According to (Rebelo, 1993), the difficulties of learning can be understood as obstacles, or barriers, found by students during the period of schooling concerning the collection or assimilation of proposed contents. The main characteristic of a difficulty for learning is the low performance in activities of reading, writing and calculus presented by students compared to what we could expect according to their intelligence and opportunities (Smith e Strick, 2001). Although the low school performance is not definitive to characterize the difficulties of learning, it is necessary for the parents and teachers to be alert to it because it represents a starting point for the detection of problems related to reading, writing and calculus.

The development of reading is a complex process and with it, graphical information can be extracted from a guideline, so that it can be understood and its meaning can be rebuilt. According to (Pineiro, 1994), the necessary skills to start the reading and writing processes, are very developed in children around their 5 years of age. At this age, the child can understand and speak many words, and this means that this child has many units in his hearing recognition and in the speaking system. As long as the children progress on their school levels, the number of words they speak increase as well. This acquaintance makes the recognition of those words easier and the number of mistakes decrease (Schwartz & Goldman, 2001). The bigger the lexicon of the child, the more efficient his speaking processing will be (Bossa, 2002).

Another important process and a base for the school performance is the writing process or communication using visual signs (Cunha, 2000). This is a complementary process of reading, although neither of them represents homogeneous levels. To learn to write, it is necessary to associate letters to corresponding sounds, organize, put them into a sound sequence and chain (Martins, 2009).

The mathematics skills and abilities are part of the human being since his early life, provided by both ordinary tasks and by those coming from social requirements. The ability of the child to take control of calculus can be understood as an operation or a series of it, and has the numbers as objects. The skill for understanding the language, for reading, for writing and for visualizing the words related to the skill of spelling, are associated to the necessary skills for the acquisition of calculation. According to (Guerra, 2002), studies over writing and calculation are found in smaller amounts than the studies over reading, probably because of the fact that they are less used processes, by most of humans or still because reading is considered a bottom line for writing and calculation to be structured.

Based on the previous comments, this study had as objective to evaluate the school performance of remaining children of quilombolas, in both genders, between 7 and 10 years of age, students of the first segment of basic education (1st to 4th level) by verifying the basic level of skills in writing, reading and arithmetic.

METHOD

Participants

One hundred and forty-five (145) children, both male and female, between 7 and 10 years of age, coming from the primary segment of basic school (1st and 4th level) at Quilombola communities in Amapá participated in this study, after being selected by applying criteria of inclusion and exclusion of 164 which correspond to the total of students, 55 female and 90 male.

Quilombolas are shelters for slave refugees in Brazil, most of them afro descendants from black and cross-bred people (Aurelio: 2008).

Entende-se como comunidades Quilombolas, local de refúgio dos escravos no Brasil, em sua maioria afrodescendentes negros e mestiços (IMENA: 2008).

INSTRUMENTS

All participants were evaluated through the School Performance Test – SPT (Stein, 1994), a Brazilian psychometric tool which objectively evaluates the basic skills for the school performance concerning writing, arithmetic and reading, in addition to the total by levels, scoring the performance as superior, medium and inferior, except the first level which was scored in four levels, superior, superior medium, inferior medium and inferior, so that they were not grouped within very large intervals.

The test comprises three subtests: writing (writing own name and random words by means of a dictation), arithmetic (oral solution of problems and calculation of written arithmetic operations) and reading (recognition of isolated words from the context). For the evaluated levels, the rating for scoring right answers is as follows: 1st level (superior: 90; superior medium: 55-89; inferior medium: 9-54; inferior: 8), 2nd level (superior: 106; medium: 87-105; inferior: 86), 3rd level (superior: 113; medium: 102-112; inferior: 101) and 4th (superior: 122; medium: 112-121; inferior: 111).

PROCEDURE

At first, a close contact with the basic learning schools in the public system located in the Quilombola communities in Amapá was made. In every school, there were contacts with the Directors to explain the objectives of the research project and the possible contributions for the population studied. Later, ordinary meetings were requested to be scheduled, at first with the

Community Agents of Health to identify the group age, gender and ethnics of children by means of the records of those Agents, and later with the parents and/or sponsors, so that there could be explanation about the procedures of the research and request, to people concerned, the signature of the Free and Clarified Consentment Term, in accordance with the criteria of the Committee for Ethics in Researches of the Institute for Learning and Research of Amapá – ILRA. After the signature of the terms, the day and time of application of the protocol were scheduled.

The collection of the data began with the application of the SPT – School Performance Test in individual sessions with the participants and with the help of two properly skilled teachers and the researcher.

The data collected were analyzed and interpreted, using descriptive statistics to characterize the sample, the t-test of Student to compare the quantitative data of the two samples, and the ki-square test to compare the averages of different samples for the qualitative data, the analysis of variance of a criterion to compare more than two samples and Pearson's linear progression to check the association among variables. A level of significance for p less or equal to 0.05 was used.

RESULTS

Table 1 - Analysis of variance for a criterion of scores obtained in three results of the four levels

Level	F	p	Writ. X Arit.		Writ. X Read.		Arit. X Read.	
			Q	p	Q	p	Q	p
First	25.39	<0.01*	1.22	n.s.	8.05	<0.01	9.27	<0.01
Second	28.98	<0.01*	1.68	n.s.	8.37	<0.01	10.05	<0.01
Third	686.62	<0.01*	6.67	<0.01	41.68	<0.01	48.35	<0.01
Fourth	104.37	<0.01*	4.18	<0.05	15.23	<0.01	141.41	<0.01

Table 1 shows that there were significant differences in the scores obtained in each level studied, in the three fields analyzed, reading, arithmetic and reading. It can be seen that in the first level there was a significantly higher score in reading than in reading and arithmetic. In the second level, the observation was the same as in the first. But in the third level, there was a significantly higher score in reading than in writing and in arithmetic. And finally, in the fourth level, there was a similar occurrence to the one observed in the third level. These findings suggest that reading is the main component of studying the children in the four levels within the learning scope analyzed, whereas arithmetic is the one that has the lowest weight and importance in the background of the children who study those four levels analyzed.

Table 2 – Number of individuals according to the classification in different contents in the first level

Variable	Superior	Medium Superior	Medium Inferior	Inferior	X ²	p
Writing	0	6	28	20	36.37	<0.01*
Arithmetic	2	1	16	35	56.07	<0.01*
Reading	4	13	26	11	18.74	<0.01*
X ²	0.64	10.90	3.54	13.36	---	---
P	0.15	<0.01*	0.17	<0.01*	---	---

Table 3 – Number of individuals according to the classification in different contents in the second level

Variable	Superior	Medium	Inferior	X ²	p
Writing	0	14	28	28.00	<0.01
Arithmetic	3	15	24	15.86	<0.01
Reading	0	15	27	26.14	<0.01
X ²	0.51	0.05	0.33	---	---
P	0.24	0.98	0.85	---	---

In Tables 2 and 3 the results are similar. We can see no significant difference between rates obtained in each content investigated for first graders. It is observed that in writing, the average lower and lower had a significantly greater number of subjects that the average level higher and higher (no subject). For arithmetic were significantly more subjects in the lower level and lower average than in the other levels. To read there was a significantly greater number of subjects on average lower than other levels. The average level above it was found that this was significantly higher in reading than in the other content, and that the level was significantly more common in arithmetic than in the other content.

Table 4 – Number of individuals according to the classification in different contents in the third level

Variable	Superior	Medium	Inferior	X ²	p
Writing	1	11	19	15.74	<0.01
Arithmetic	0	16	15	15.54	<0.01
Reading	1	14	16	12.84	<0.01
X ²	0.51	0.93	0.52	---	---
P	0.24	0.63	0.77	---	---

For children in third serious, in Table 4 shows that for writing the lower level was significantly more common than the other levels, for arithmetic and reading and the average weight was significantly more common than the top.

Table 5 – Number of individuals according to the classification in different contents in the fourth level

Variable	Superior	Medium	Inferior	X ²	p
Writing	4	4	10	4.00	0.14
Arithmetic	0	6	12	12.00	<0.01
Reading	5	5	8	1.00	0.61
X ²	1.00	0.93	0.80	---	---
P	0.01*	0.63	0.67	---	---

Table 5 presents the mean level significantly more common than the other levels and that the average level was significantly more common than the above (no subject). In writing and reading the top level was significantly more common than in arithmetic.

Table 6: Pearson's Linear Correlation among variables of the sample

Correlation	r	R2	T	p
Age X Writing	0.62	0.38	9.45	<0.01*
Age X Arithmetic	0.63	0.40	9.80	<0.01*
Age X Reading	0.55	0.31	7.95	<0.01*
Age X Total of Points	0.61	0.37	9.18	<0.01*
Writing X Arithmetic	0.82	0.63	17.11	<0.01*
Writing X Reading	0.76	0.58	14.17	<0.01*
Arithmetic X Reading	0.67	0.44	10.70	<0.01*

From the point of view of correlation, Table 6 highlights the occurrence of strong correlations with the variables analyzed. In this table, it can be seen that there is a significant correlation between age and writing, between age and arithmetic, between age and reading, between age and total of points obtained, between writing and arithmetic, between writing and reading and between arithmetic and reading.

As it can be seen, the increase in age led to significant increases in scores of writing, in arithmetic, in reading and total score. High levels in writing led to high levels in arithmetic and reading and finally, high levels of arithmetic led to high levels of reading.

DISCUSSION

Starting from the assumption that studies about the processes of reading, writing and calculation, based on the approach of the information processing are still recent in Brazil, this study aimed to contribute to a better understanding of the aspects that involve the standards of performance of children concerning the learning of basic skills like reading, writing and arithmetic. (Smith e Strick, 2001)

Despite the controversial discussions about the effectiveness of school assessment in the educational process, no one can deny its necessity as a way of controlling the contents taught at school. Specially in the first school levels, this procedures can help in the implementation of pedagogical methods that are able to eliminate or reduce eventual problems.

The school performance can be understood as an attempt to assess how much a student is able to follow the contents proposed to the school level which he belongs to. In this study, this performance was assessed by means of SPT in order to qualify the performance of the students in their basic skills of language which are codes of important communication for the human being in society. (Selikowitz, 2001)

In an overall view, it could be seen that the children with worse performance in their basic skills presented a significantly bigger difficulty both in the discrimination and in the quickness for the execution of tasks, based on the other kinds of performance. This way, it is useful to highlight the importance of aspects of maturity concerning the performance, involving the neuronal connection networks responsible for the biggest competence. (Capellini, 2005)

Reading implies a process of "lexical analogy", in which the individual looks for a word that he knows, based on the pronunciation of the non-familiar word. This way, children have greater ability to develop this mechanical process. They are the ones who read better and, hence, those who will recognize words easily.

As to the SPT written subtest, the results collected indicate an association between the best performance in this subtest and the highest percentage of right answers in the recognition of words.

Starting from the assumption that the abilities for reading and writing are interconnected skills, that is, to write is necessary that the word is part of the list of writing signals that the child "knows", it is presumed that when this child writes, he is able to read what he is writing. This way, we can consider that the results obtained, in the written subtest, confirm these expectations, as in the written subtest, the results found were similar; that is, children who can read and write better, recognize the words much faster. Considering the fact that the decoding process for reading is easier learned by the children than the decoding process of writing according to Pinheiro (1994), it is expected that the individuals with better scores in the written subtest have also presented a better performance in reading. According to this very same author, the process of reading, because it requires only the spelling process, doesn't require a perfect writing skill from the reader. Nevertheless, for the process of reading, the individual should have a control on spelling so that he could write the word. (Proença, 2002)

The results found in the SPT arithmetic subtest are equivalent to the ones obtained in the writing and reading subtests, that is, the children who had better performance in arithmetic recognized words in a greater percentage. This way, when we analyze the results of the three subtests, we can see that there is a direct correspondence between the best performance in SPT and the ability of the child for the recognition of words. The greatest ability for the child to reading, writing and math operations can be understood based on the development of metarules in the execution of those tasks, which implies a save of energy by the brain, by the use of faster routes. (Rebello, 1993)

FINAL COMMENTS

The data obtained in this study show a high number of students with low performance, which represents a critical condition of formal education given to them. In fact, if we can understand difficulties only when we look at the teaching-learning process, it seems urgent that educational policies can better be concerned about the theme of difficulty for learning, requiring, without a doubt, a great effort from the educational system. The more precocious the identification made by the teachers is, concerning the changes of reading, writing and calculating, the better it will be to settle its pedagogical practice, once matters which go through the classroom like the school failure, the repetition and the school drop-out can be reduced by delivering better conditions of services and diagnosis of those deficits.

The identification that the biggest number of students, in this study, with problems of learning is in the fourth school level makes us think about how our students, who present problems in their school learning, can go through situations of teaching-learning even if they failed, throughout their levels at school, to overcome their difficulties, creating this way, a blank in understanding how the teacher who at the same time, "can" identify the students with changes in learning doesn't "know" or "cannot" help the student overcome his pedagogical mistakes.

This study leads to the need of considering that the teacher who works with children who are under neurological, cognitive and linguistic development deserves a continuing formation for the understanding of bio-psycho-social relationships involved in the event of a normal academic development of those children, not only in the precocious identification of problems of learning with a pedagogical or social start, but also participating in teams of professionals who make diagnosis for the verification of neuropsychological malfunction, which would contribute to the decrease of "labels" about the school problems, as well as for a

greater development of those children in class.

So, it is necessary that studies about the difficulties of learning be enhanced, once its incidence, independently from causes, is very high. In opinion (Bossa,2002), there is a need for the progress of these studies in Brazil because of the damages for the children, for the family, for the education system, for the country and for the professionals working with education.

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SCHOOL PERFORMANCE – EVALUATION OF CHILDREN FROM 1ST TO 4TH SCHOOL LEVEL AT QUILOMBOLA COMMUNITIES IN THE STATE OF AMAPÁ

ABSTRACT

This study had as objective to evaluate the school performance of remaining children of quilombolas. 145 students of the first segment of basic education (1st to 4th level) of Quilombola communities, 55 girls and 90 boys, participated in the process. The Test of School Performance was used to evaluate the basic skills for writing, arithmetic and reading, classifying them into superior, medium and inferior. The results showed significant difference showing that the lowest performance was verified for males and for the fourth level of basic teaching. We can conclude that studies about the difficulty of learning should be widened, once its incidence, independently from causes, is very high and its presence causes damages to the child, to the family, to the educational system, to the country and to the professionals who work with education.

RÉSULTATS SCOLAIRES: EVALUATION DES ENFANTS 1RE À 4E ANNÉE QUILOMBOLA DE L'ETAT D'AMAPÁ

RESUMÉ

Cet article a pour but évaluer le développement des enfants fils des esclaves. dans ce premier stoge ont participé 145 élèves de l'enseignement fonamental (1 ère 4 ème année) dès communauté Quilombolas étant 55 apprerants du sexe féminin et 90 apprerants du sexe masculin. On a utilisé lê teste de développe'ment scolaire qui a évalué lês capacites fondamentales em ce qui concer l'écriture, l'arithmétique, et la lecture, em classifint em supéricur, moyer et infériem. Lês résultats ont montré la différence significativa em indiquant lê plus faible performance dès homes de la 4 éne année du primarire. On a conclu que lês études de causes sonttri eleves et se présence cause de prejudices aux enfants, á la famille, au sigstème educatif, na pays et auprofessionnels qui travaillent dons l'éducation.

MOT-CLÉS: évaluation, l'apprentissage, le rendement scolaire

RÉSULTATS SCOLAIRES: EVALUATION DES ENFANTS 1RE À 4E ANNÉE QUILOMBOLA DE L'ETAT D'AMAPÁ

RÉSUMÉ

Cette étude visait à évaluer le rendement scolaire des enfants restés en marron. 145 élèves ont participé au premier segment de l'éducation de base (1re à 4e année) des communautés quilombos, étant de 55 femmes et 90 hommes. Nous avons utilisé la performance des écoles d'essai, qui a évalué les compétences fondamentales pour l'écriture, l'arithmétique et la lecture, les classer en haut, milieu et bas. Les résultats ont montré de différence significative indiquant que la plus faible performance pour les hommes et la quatrième année du primaire. Nous concluons que les études des troubles d'apprentissage mai être améliorée, étant donné que son incidence, indépendamment de la cause, est très élevé et que sa présence cause un préjudice à l'enfant, la famille, le système éducatif, dans le pays et pour les professionnels travaillant dans l'éducation.

MOTS-CLÉS: évaluation, l'apprentissage, le rendement scolaire

DESEMPENHO ESCOLAR: AVALIAÇÃO DE CRIANÇAS DE 1ª A 4ª SÉRIE DE COMUNIDADES QUILOMBOLAS DO ESTADO DO AMAPÁ

RESUMO

Este estudo teve como objetivo avaliar o desempenho escolar de crianças remanescentes de quilombolas. Participaram 145 estudantes do primeiro segmento do ensino fundamental (1ª a 4ª série) de comunidades Quilombolas, sendo, 55 do sexo feminino e 90 do sexo masculino. Foi utilizado o Teste de Desempenho Escolar que avaliou as capacidades fundamentais para a escrita, aritmética e leitura, classificando-os em superior, médio e inferior. Os resultados revelaram diferença significativa indicando que o menor desempenho foi verificado para o sexo masculino e para a quarta série do ensino fundamental. Conclui-se que estudos sobre dificuldade de aprendizagem sejam ampliados, haja vista que sua incidência, independentemente das causas, é muito alta e sua presença ocasiona prejuízos para a criança, para a família, para o sistema educacional, para o país e para os profissionais que atuam na educação.

PALAVRAS-CHAVE: avaliação, aprendizagem, desempenho escolar

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