

Creative Education, 2016, 7, 419-427

Published Online March 2016 in SciRes. <http://www.scirp.org/journal/ce>

<http://dx.doi.org/10.4236/ce.2016.73041>



School Delay of Child in Brazzaville (Congo)

Jean Robert Mabilia-Babela^{1,2}, Steve Vassili Missambou Mandilou^{2*}, Evrard Romaric Nika², Georges Marius Moyen^{1,3}

¹Medical Department, Health Sciences Faculty, Marien Ngouabi University, Brazzaville, Congo

²Department of Pediatrics-Infants Ward, Teaching Hospital of Brazzaville, Brazzaville, Congo

³Department of Pediatrics-Intensive Care Unit, Teaching Hospital of Brazzaville, Brazzaville, Congo

Email: mstevevassili@yahoo.fr

Received 1 January 2016; accepted 13 March 2016; published 16 March 2016

Copyright © 2016 by authors and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

The aim of this study was to determine the prevalence of school delay in school age children and to identify its determinants in Brazzaville. A case-control study, comparing school age children with a school delay (Group 1 or cases) to those who had not school delay (Group 2 or control), was carried out between February and July 2013. It included students of CM2 (primary 6) and those of 3^{ème} (form 4) of both public and private schools of Brazzaville. The sample selection was made according to a random survey by strata, the number of strata was set to 2. The sample consisted of 2064 pupils including 1138 girls (55.1%). A total of 2064 students (1138 male/926 female), 792 of them had a school delay, with a prevalence of 38.3%. It was 27% in the private sector and 46.9% in the public one; 28.2% in primary education compared to 48.1% in the college; 27.8% in girls and 48.8% in boys ($p < 0.001$). 21.4% of students in CM2 (primary 6) of the public and 16.7% in the private sector had repeated classes 3 times; 4.2% of students in 3^{ème} (form 4) of the public education had repeated classes 4 times. Kindergarten program attendance had a positive effect on later school performances ($p < 0.05$). The parent's level of education and socio-economic status of the family (low and mean for students in CM2 of public schools and of 3^{ème} of private schools, high for pupils in CM2 of private schools) and underweight among pupils in CM2 of the private sector were significantly correlated with school delay ($p < 0.05$). The prevalence of school delay was high in Brazzaville (38.3%), boys were more affected than girls. The kindergarten program attendance was found to have a positive effect on later school performances, while parent's low level of education and low socioeconomic status of the family significantly influenced the rate of school delay in children in Brazzaville. The high prevalence of school delay in child in Brazzaville imposed substantial actions, in addition to the efforts already made.

Keywords

School Delay, Child, Brazzaville

1. Introduction

Schooling is of great importance in the life of a child in that academic success conditioning adaptation and social success (Joseph, 1999). In Congo, the school law in force provides that: “any child living on the territory of Congo has the right, without distinction of origin, nationality, sex, belief, opinion or wealth to education which ensures the full development of intellectual, artistic, moral and physical abilities as well as its civic and vocational training; and that going to school is compulsory up to the age of 16 years for all children” (Republic of Congo, Ministry of Primary, Secondary Education and Literacy, 2011). Moreover, education in public schools is free and according to the demographic and health survey of Congo conducted in 2012, the rate of school attendance in Congo was 95.9% for boys and 95.5% for girls (Demographic Survey and Health of Congo, 2012). School, being an area where most of the children gathered, is an ideal place where it is easy to identify difficulties, disorders or diseases early in their course. School delay is one of these difficulties or disorders of school age children, and is a translation of poor results that leads to educational failure thus exposing the child to its related consequences. Several determinants or factors (including teacher and/or student intrinsic factors, those related to the country’s educational system) can reflect the fact that a child has difficulties to achieve excellent school performances.

School delay is defined as the fact that some children repeat their class or start school later than as intended by the curriculum (Pillet, 1969). In this study, school delay is considered when at least two classes are repeated by a student.

In Congo, due to the high frequency of infectious and parasitic diseases, certain issues relating to the health of children like school delay are disregarded by health’ policy makers. It is in this context, and with reference to the declaration of the United Nations Convention on rights of the child (UNESCO, 2000), including in its principle 2, which provides that: “every child physically, mentally or socially disadvantaged must receive treatment, education and special care that requires his or her situation” that we decide to approach the problem of child school delay in Brazzaville to determine its prevalence and to identify its determinants. This should help to build strategies to diminish that phenomenon.

2. Material and Methods

The study was carried out in Brazzaville from February to July 2013. It included children in the end of primary school (CM₂ = primary 6) and those in secondary school (3^{ème} = form 4) of the general education curriculum of both the public and private sectors. The sampling was done by multistage random sampling technique. First, for the public sector, one primary school was selected in each of the 11 school districts and two secondary schools in each of the three school inspections; while for the private sector, one primary school and one secondary school were selected in each of the 9 districts of the city of Brazzaville. Then, in each school selected (public and private), the random draw retained two classes of CM₂ (primary 6) and two classes of 3^{ème} (form 4). Parents of students from each selected class were first clearly informed via consent forms containing information about the study and its objectives sent to them. Thus, within each class, all students were approached. The (same) investigator first identified students from registration lists to both the national primary and secondary certificate of education examination. Then, with teachers’ help, each child was approached individually. The interview took place in French (which is the official language of Congo), and sometimes in national languages (there are two in Congo, Kituba and Lingala) for better understanding (especially for students of primary school). Data were collected on a questionnaire set for this purpose. Questionnaires were distributed to all the students in primary 6 and form 4, to be taken home and be partly filled and signed by their parents, thus confirming their agreement to allow the child to participate in the survey (see Appendix). For each student with a school delay (defined as cases), another student (defined as control, 2 at most) was selected randomly in the same class. It was a child (or children) who came immediately after the one with school delay in the alphabetical order. Only children regularly enrolled in the school, who started school at the official age (which is 6 years) in the same school until the time of the survey, were selected in this study. Children whose parents had not returned the signed questionnaire sent to them or those incompletely filled in were excluded from the study. The two samples were matched by sex.

For each child, the investigation focused on sex, age, information about education, the language(s) spoken at home, and the parents’ profession, educational level and socioeconomic status. The socioeconomic status of the family was obtained using the Gayral-Taminh classification (Gayral-Taminh, 1999).

Data analysis was done using the stat view software 5. The effect of a variable on the prevalence of school delay was the subject of a multifactor analysis through the method of the logit. For that, the odds ratio (OR) was calculated, with the confidence interval (CI). Then, to identify any confounding factors, an adjustment on the socioeconomic status and the level of education of parents was done. The estimation of the observed influence used the Chi-square test with a statistical analysis done at 5% level of significance (a p -value of ≤ 0.05 was regarded as statistically significant).

3. Results

A total of 2064 students (1138 male/926 female) from primary 6 and form 4 participated in the study. Seven hundred ninety two (792) were found to have a school delay, making an overall prevalence of 38.4%. It was 46.9% in public sector and 27% in the private one, 48.8% in males and 29.9% among girls and 28.2% in primary schools compared to 48.1% in the secondary.

Among the 432 students from the public sector with school delay, 279 have repeated two times (64.6%), 135 three times (31.2%) and 18 four times (4.2%). In the private sector, among the 360 children with a school delay, 180 have repeated 2 times (50%) while the other 180 repeated 3 times (50%). **Table 1** presents the univariate study of the risk factors for school delay. This shows that in the public sector, sex did not have any influence on the class repetition (OR = 1; $p > 0.05$); on the other hand, in the private sector, boys repeated classes more than girls (OR = 2.9; $p < 0.0001$). Moreover, this influence remained when we combined together the entire sample from both the public and the private sector (OR = 1.6; $p < 0.001$). Children who did not attend the kindergarten program were more likely to have school delay in both education sectors, public ($p < 0.001$) and private ($p < 0.01$). On the other hand, the type and the number of languages spoken within the family unit did not affect school delay in both private and public sector ($p > 0.05$). More children from families of low socioeconomic status were found to have school delay in both public (OR = 3.0; $p < 0.0001$) and private (OR = 4.6; $p < 0.001$) sectors. This was similar in children whose mothers did not reach a college/university education level. The level

Table 1. Univariate analysis of school delay factors according to education sector.

Factors	Public Sector		OR [CI 95%]	p	Private Sector		OR [CI 95%]	p
	Ca	Co			Ca	Co		
Sex								
Male	209	297	1 [0.8 – 1.3]	>0.05	252	216	2.9 [2.2 – 3.9]	<0.001
Female	223	315	1 [0.8 – 1.3]	>0.05	108	264	0.4 [0.3 – 0.6]	<0.001
Kindergarten								
Yes	153	270	0.7 [0.6 – 0.9]	<0.001	144	288	0.4 [0.3 – 0.6]	<0.01
No	279	342	1.4 [1.1 – 1.8]	<0.001	216	192	2.3 [1.6 – 3.3]	<0.01
Type and numbers of languages spoken at home								
French	47	81	0.8 [0.6 – 1.1]	>0.05	72	120	0.8 [0.6 – 1.1]	>0.05
National	40	63	0.9 [0.6 – 1.3]	>0.05	36	48	1.0 [0.6 – 1.6]	>0.05
Many	345	468	0.8 [0.6 – 1.1]	>0.05	252	312	1.3 [1.0 – 1.8]	>0.05
Socio-economic status								
High	49	162	0.4 [0.3 – 0.6]	>0.05	100	243	0.4 [0.3 – 0.6]	>0.05
Mean	221	360	0.7 [0.6 – 0.9]	>0.05	148	184	1.1 [0.8 – 1.5]	>0.05
Low	162	90	3.0 [2.3 – 4.0]	<10 ⁻⁴	112	53	3.6 [2.5 – 5.2]	<0.001
Father's level of education								
College	59	148	0.5 [0.4 – 0.7]	<0.001	116	149	0.9 [0.7 – 1.2]	>0.05
<College	373	464	2.0 [1.4 – 2.8]	<0.001	244	331	1.1 [0.8 – 1.5]	>0.05
Mother's level of education								
College	37	85	0.6 [0.4 – 0.9]	<0.02	56	133	0.5 [0.4 – 0.7]	<10 ⁻⁴
<College	395	527	1.7 [1.1 – 2.6]	<0.02	304	347	2.1 [1.5 – 3.0]	<10 ⁻⁴

OR = odds ratio, CI = confidence interval, Ca = cases, Co = controls.

of education of the father influenced the school delay only for the public sector ($p < 0.001$). Yet the influence of the level of education of the father was not statistically significant ($p > 0.05$) when considered the combined overall number of school delay.

After an adjustment on the socioeconomic status and the level of education of parents (Table 2), the influence on school delay remained for gender ($p < 0.001$), for kindergarten passage ($p < 0.01$), for low socioeconomic status of the family ($p < 0.001$), and for the high level of education of the mother ($p < 0.02$) when considered the overall sample.

4. Discussion

Several factors reflect the fact that a child repeats classes in the school curriculum. These include teacher intrinsic factors and the factors related to the country's educational system. Factors related to the teacher require a complex psychometric and psycho-social evaluation given the pejorative connotations that they expose. In this study, we have chosen to assess those related to children, because they are more accessible and more decisive factors to explain the high rate of school delay as reported in this study. The choice of CM₂ (primary 6) and 3^{ème} (form 4) classes is due to the fact that these classes are the end of its corresponding cycle in our education system. That enabled us to assess the phenomenon during each cycle. Moreover, in small children and young adolescents, the familial and socio-cultural impact is more present, compared with teens and young adults (as it is the case of students in high schools and universities). Indeed, school delay doesn't have the same meaning for younger students compared to older ones. The repetition during the primary cycle is generally the sign of profound difficulties, which persist over schooling, while a repetition at the end of the secondary or high school is much less serious as stated by Cosnefroy and Rucker (Cosnefroy & Rucker, 2005).

In our study, the prevalence of 38.3% was found for the sample as a whole. The results observed in our study seems somewhat higher than the one of 33.9% found by Murat (Murat, 2009), who included children from 7 to 18 years old; and substantially lower than the one reported by Akoué in Gabon (Akoué, 2007), 50.5%. However, it should be noted that these two authors reported on children in whom school delay was defined as repeti-

Table 2. Multivariate analysis of school delay factors according to education sector.

Factors	Public Sector			<i>p</i>	Private Sector			<i>p</i>
	Ca	Co	OR* [IC 95%]		Ca	Co	OR* [IC 95%]	
Sex								
Male	209	297	0.8 [0.6 – 1.0]	>0.05	252	216	2.1 [1.6 – 3.6]	<0.001
Female	223	315	0.8 [0.6 – 1.0]	>0.05	108	264	0.4 [0.3 – 0.6]	<0.001
Kindergarten								
Yes	153	270	0.6 [0.5 – 0.8]	<0.001	144	288	0.4 [0.3 – 0.6]	<0.01
No	279	342	1.3 [1.0 – 1.8]	<0.01	216	192	2.0 [1.5 – 2.7]	<0.01
Type and numbers of languages spoken at home								
French	47	81	0.7 [0.5 – 1.1]	>0.05	72	120	0.7 [0.5 – 1.0]	>0.05
National	40	63	0.8 [0.5 – 1.2]	>0.05	36	48	0.9 [0.6 – 1.4]	>0.05
Many	345	468	0.7 [0.5 – 1.0]	>0.05	252	312	1.1 [0.8 – 1.5]	>0.05
Socio-economic status								
High	49	162	0.3 [0.2 – 0.5]	>0.05	100	243	0.3 [0.2 – 0.4]	>0.05
Mean	221	360	0.6 [0.5 – 0.8]	>0.05	148	184	0.9 [0.7 – 1.2]	>0.05
Low	162	90	2.7 [2.0 – 3.6]	<10 ⁻⁴	112	53	3.3 [2.3 – 4.8]	<0.001
Father's level of education								
College	59	148	0.4 [0.3 – 0.6]	<0.001	116	149	0.8 [0.6 – 1.1]	>0.05
<College	373	464	1.8 [1.3 – 2.5]	<0.001	244	331	1.0 [0.8 – 1.3]	>0.05
Mother's level of education								
College	37	85	0.5 [0.3 – 0.8]	<0.02	56	133	0.4 [0.4 – 0.7]	<10 ⁻⁴
<College	395	527	1.5 [1.0 – 2.3]	<0.02	304	347	1.8 [1.3 – 2.6]	<10 ⁻⁴

tion of at least one class, unlike in our study where the school delay is considered from two classes repeated. Thus, if we can extrapolate the results of these two authors to the definition used in our work, we can see easily the importance of the problem in our study.

The prevalence of school delay observed in this work varied according to the educational sector, 27.0% in the private sector and 46.9% in the public ($p < 0.001$). The predominance of the school delay in the public sector is certainly due to the socio-economic difficulties that presumably are more prominent in families of children of the public sector compared to those of the private sector. Indeed, with regard to tuition costs in the private sector and the fact that more than 50% of the Congolese population lives below the poverty threshold (United Nations Development Program, 2012), we can easily infer that the families of the children in the public sector are facing more of socio-economic difficulties; thus explaining the predominance of school delay. Moreover, it is clear in **Table 1** that the low socio-economic level was correlated with both school delay in the public sector ($p < 0.0001$) than in the private sector ($p < 0.001$); This effect continued after adjusting the level of education of parents (**Table 2**). It should be noted that although education in Congo is free, parents have the responsibility of buying the manuals and other working tools used by their children, there is no national social security and the average number of children in families is 4 (Demographic Survey and Health of Congo, 2012). Moreover, it is not uncommon to find whole classes where all children do not have manuals or books in several public schools.

The prevalence of school delay also varied according to the level of education: 28.2% in primary school compared to 48.1% in secondary ($p < 0.001$). Thus, it appears that in Congo, students significantly repeat twice more in secondary school than in primary school. Several factors may explain this finding. The first is psychological, as noted by some authors (Akoué, 2007; Bawa, 2008; Gilly et al., 1998), and is the loss of self-esteem generated by repetition: a repetition leads to another. The second one is cultural, and is due to the relaxation of the attention given to a child as he/she is growing. Thus, in our societies composed of many children in one family, the attention is given more to the youngest than to the oldest child.

Finally, a statistically significant difference ($p < 0.001$) for school delay has also been reported by sex: 27.8% in girls and 48.8% in boys. Our results are similar to those found by Rosenwald in France (Rosenwald, 2006) where school delay represented 29% of girls compared to 38% among boys. Akoué in Gabon (Akoué, 2007) found a repetition rate higher in form 4 among boys (51.2%) compared to females (49.9%), but no statistically significant difference ($p > 0.05$). These results suggest that girls have better school course than that of boys. The paramount place of fun activities in boys of school age compared to girls may explain this difference. In addition, some social behaviors that may have an impact on academic performances, such as consumption of licit or illicit drugs are more prevalent in boys. Moreover, in Congo, the age of onset of alcohol and tobacco consumption and the first sexual intercourse is earlier in boys than in girls (Mabilia-Babela et al., 2008; Mabilia-Babela et al., 2008; Mabilia-Babela et al., 2008).

Concerning the degree of the delay, this study has shown, for students in primary 6 (CM₂) that 21.4% in public schools and 16.7% in private sector of them have already repeated 3 times. These results reflect school difficulties of these children soon in their curriculum (already in the primary cycle). In the same way, 4.2% of students in form 4 (3^{ème}) of the public schools have repeated 4 times.

These difficulties can be warning elements of school drop-out. Thus, effective measures must be found and implemented to provide adequate solutions to this problem.

Kindergarten program attendance was found to have a positive effect on later school performance for both children of the public sector ($p < 0.001$) and those in the private sector ($p < 0.01$) (**Table 1** and **Table 2**). Studies on the kindergarten program attendance of children showed that it had a positive influence on cognitive, linguistic and social development (Richter et al., 1997), which are important elements for the education of children. Another important fact is that kindergarten represents a place where some specific disorders should be detected and treated early, what should then be a guarantee for a successful curriculum for children with such disorders.

The low level of education of parents was associated with the school delay in Brazzaville (**Table 1** and **Table 2**). Education level of parents is an undeniable factor in child's school success as shown by several authors (Murat, 2009; Richter et al., 1997; Driessen & Dekkers, 2007; Janosz, 2000). This finding may be explained by several reasons. First are environmental factors, as Soualem et al. noted in their study (Soualem et al., 2005) where the level of education of parents had an impact on child's attention, attendance and hyper-activity. Next are genetic factors underlying the heredity contribution on the level of intelligence of a child (Voizot, 1973). Driessen and Dekkers (Driessen and Dekkers, 2007) in The Netherlands reported a proportion of school delay four times higher among children whose parents had stopped their education at the primary level compared to children

whose parents attained college education. However, it is rather the mother's level of education which has a more significant impact on the schooling of the child than the father. Moreover, in our study, when the results of the children of the two sectors were combined, only the impact of the level of education of mothers remains ($p < 0.0001$) even after an adjustment on the socio-economic level. Richter et al. (Richter et al., 1997) in South Africa made a similar finding. Terrail (1992) meanwhile found that mothers school history matters on the academic success of their offspring, in the sense that more they were exposed to school and knowledge, more they were concerned about the success of their children. Mothers' level of education has great impact on school performance of children because they often help more their children than fathers do. They spend more time helping each of their children (at the age of basic education) compared to fathers (Murat, 2009).

The limitation of this study is that although these results express very well the magnitude of school delay in Brazzaville, but they could not be extrapolated to the whole of the country because the socioeconomic and demographic realities are not the same in rural and in urban area.

In addition, we would like for a future research project, to conduct the same study throughout the country in order to have a real overview of the problem. More, we wish to go further by studying the correlates of the problem, especially cases of absenteeism and dropout.

5. Conclusion

Like other developing countries, school delay constitutes a public health problem in Congo. In view of the place that occupies a youth elite in the future development of a country, a global reflection is necessary on the education system and the improvement of the purchasing power of the population.

References

- Akoué, M. C. (2007). *Repetition of Girls in Form 4 of the Secondary Schools of Libreville in Gabon*. Thesis to Obtain the Rank of Philosophiae Doctor (PhD), Faculty of Graduate Studies of Laval University in the Context of the Doctoral Program in Educational Administration and Policy.
- Bawa, H. (2008). Family Educational Practices, Self-Esteem and School Performance in Adolescents: Case of Adolescents of the District of Atakpamé (Togo). *Ibn Postgraduate Studies in Psychology of Education*.
- Cosnefroy, O., & Rocher, T. (2005). The Repetition during Compulsory Education: New Analyses, Same Findings. Ministry of National Education, Les Dossiers d'Éducation et Formations, 70.
- Demographic Survey and Health of Congo (EDSC-II), 2011-2012.
- Driessen, G., & Dekkers, H. (2007). Dutch Policies against Socio-Economic and Ethnic Inequalities in Education. *Revue Internationale des Sciences Sociales*, 3, 505-522.
- Gayral-Taminh, M., Arnaud, C., Parant, O. et al. (1999). Pregnancies and Childbirth by Women from the Maghreb and Black Africa Followed up in the Maternity Ward of Toulouse. *Journal de Gynécologie Obstétrique et Biologie de la Reproduction*, 28, 462-471.
- Gilly, M., & Lacour, M. (1998). Self-Image, Social Images and School Status: Comparative Study among Pupils in Primary 6. *Bulletin de Psychologie*, 25, 792-806.
- Janosz, M. (2000). School Dropout among Adolescents: North American Prospect. *VEI Issues*, 122, 105-127.
- Joseph, J. (1999). *School Health. Social Pediatrics from A to Z* (pp. 180-211). Paris: Medicine Sciences Flammarion.
- Mabilia-Babela, J. R., Mahoungou-Guimbi, K. C., Massamba, A., & Senga, P. (2008). Smoking in Adolescents in Brazzaville (Congo). *Annales Africaines de Médecine*, 1, 31-39.
- Mabilia-Babela, J. R., Massamba, A., Bantsimba, T., & Senga, P. (2008). The Sexuality in Adolescents in Brazzaville, Congo. *Journal of Obstetric Gynecology and Reproductive Biology*, 37, 510-515.
- Mabilia-Babela, J. R., Massamba, A., Senga, P., & Srirajaskanthan, R. (2008). Beer Consumption in Teenagers in Brazzaville (Congo). *Beer in Health and Disease Prevention*, 1, 165-170.
- Murat, F. (2009). School Delay Depending on the Parental Environment: The Influence of Parenting Skills. *Economie et Statistique*, 424-425, 103-124. <http://dx.doi.org/10.3406/estat.2009.8033>
- Pillet, J. (1969). The Measurement of School Delay in France and in African French-Speaking Countries. *Cahiers d'Études Africaines*, 36, 456-469.
- Republic of Congo, Ministry of Primary, Secondary Education and Literacy (2010-2011). Department of Studies and academic Planning, Department of Statistics. *Statistical Yearbook*, 178.
- Richter, L. M., Rose, C., & Dev Griesel, R. (1997). Cognitive and Behavioural Effects of a School Breakfast. *South African*

Medical Journal, 87, 93-100.

Rosenwald, F. (2006). Girls and Boys in the Education System. Ministry of National Education, Higher Education and Research, Department of Evaluation and Forecasting. *Note d'Information 2006*, 06.06.

Soualem, A., Aboussaleh, Y., Ahami, A. O. T. et al. (2005). Impact of Socioeconomic Status on Developmental and Cognitive Development in Children Enrolled in Morocco. *Elsevier Masson SAS*, 15, 1155-1704.

Terrail, J.-P. (1992). School Success: The Mobilization of Girls. *Contemporary Societies, Looks on Education*. 11-12, 53-89.

UNESCO (2000). Dakar Framework for Action: Education for All. Meeting Our Collective Commitments. *World Forum on Education*, Dakar, Senegal, 26-28 April 2000, UNESCO, Paris.

United Nations Development Program (UNDP) (2012). Report on Human Development in Africa: Towards Sustainable Food Security.

Voizot, B. (1973). *The Development of Intelligence of the Child* (pp. 241-249). Armand Colin, Paris.

Patient Questionnaire

School delay of child in Brazzaville (CONGO)

N°:

Date:

Name _____

Parent's phone number _____

Date of birth (dd/mm/yy): _____/_____/_____

Place of birth _____

Gender: Male female

History:

1) Personal:

A. School data:

Kindergarten program attendance: Yes No

If yes, please specify the age at the entry:

Current class:

Mean of transportation to school: familial car public transport on foot

Has repeated class (es): Yes No

If yes, specify the class (es) repeated_

Type of school attended: public private

School location: down-town suburb

Has changed schools during the curriculum: Yes No

If yes, please specify the reasons _____

B. Medical past history:

Birth weight:

Neonatal resuscitation: Yes No

Meningitis: Yes No

Severe neurological malaria: Yes No

Severe dehydration: Yes No

Epilepsy: Yes No

Sickle cell disease: Yes No

Asthma: Yes No

Congenital heart disease: Yes No

Motor handicap: Yes No

Head trauma: Yes No

Other pathologies: Yes No

If yes, specify the (or these) pathology (ies):

Hospital previous admissions: Yes No

If yes, specify the number: _____; and the reason: _____

2) Familial:

Language spoken at home: French: Kituba: Lingala: other:

If other, specify the (or these) language (s):

Row of the child in the siblings:

Number of siblings:

Is (s) he a twin: Yes No

If Yes, specify the rank: 1st: 2nd:

Father:

-Age:

-Profession:

-Level of education: primary secondary tertiary

-Nationality: Congolese other specify_

Mother:

-Age:

-Profession:

-Level of education: primary secondary tertiary
-Nationality: Congolese other specify_
Marital status of the parents: married divorced single
If divorced or single, who's in charge of the child: father mother both parents other
If other, specify: _____

Clinical data:

Height:

Weight: