

Self-Perception of Adaptation Teaching Practices in The Ordinary Classroom and School Performance of Children with Cerebral Palsy

Clementine Nguimatio & Peter Ngwa

The University of Yaoundé I

E-mail: clementinenguimatio@gmail.com; peterprinceson@gmail.com

ABSTRACT

Self-perception of adaptive teaching practices in the ordinary classroom and school performance as adjustment capacities in children with cerebral palsy. We found that the students with disabilities in the CNRPH and PROMHANDICAM inclusive schools are of various types. The fact that IMC learners are associated with physically and sensorially disabled and non-disabled children raises the problem of performance in terms of their ability to adjust to their inclusion in school. Our general aim is to examine and understand how the self-perception of pedagogical practices can have a significant effect on school performance as a capacity for adjustment to school inclusion for IMC. Our hypothesis is as follows: Self-perception of adaptive teaching practices in the mainstream classroom has a significant effect on academic performance as an adjustment capacity in children with Cerebral Palsy. To verify this hypothesis, we conducted a study in two CNRPH schools in the Yaoundé VI district, Mfoundi department, Centre region. A total of 150 participants of both sexes, selected based on purposive sampling, were interviewed and given a questionnaire. The statistics and results obtained enable us to understand the difficulties encountered by pupils with cerebral palsy and the adaptive teaching practices that can be put in place to facilitate the development of their performance as a means of adjusting to school inclusion.

Keywords: self-perception; adaptive teaching practice; school performance; adjustment capacity

INTRODUCTION

Recognition of the values associated with humanity is universally accepted. This is why the 1948 Universal Declaration of Human Rights (UDHR) stipulates in its preamble that the recognition of dignity is inherent in all members of the human family. Each individual must be respected by the other. It is a human need and must not be violated. The rights of human beings must be equal and inalienable. However, when it comes to education, it is clear that some children cannot go to school. This reflects the idea that universal schooling implies a systematic approach to reaching the most vulnerable children, especially those with a disability, which is even more severe. These children are very often overlooked in education policies and programs, and even worse, when it comes to adapting teaching and integrating them into school.

While they all have the same rights, it has to be said that they do not all have the same physical and psychological abilities. This means making a distinction between those who are physically and/or psychologically able and those who are not. The latter category (the one we are most interested in) includes people with disabilities. This disability can be so severe that this category of people requires specialized, or inclusive, education that is adapted to their handicap.

This justifies our article on the self-perception of adaptive teaching practices and school performance as an adjustment capacity in children with cerebral palsy. A study was carried out at the Centre National de Réhabilitation des Personnes Handicapées (CNRPH) by Cardinal Paul Emile Leger d'Etoug-Ebe.

This being the case, in this article we are interested in the self-perception of adaptive teaching practices and school performance as an adjustment capacity in children with cerebral palsy. We seek to understand this using a questionnaire addressed to the pupils. This article aims to examine and understand the effect that self-perception of adaptive teaching practices in the ordinary classroom may have on school performance as a capacity for adjustment in children with cerebral palsy.

We hypothesize that: the self-perception of adaptive teaching practices has a significant effect on school performance as an adjustment capacity in children with cerebral palsy.

The paper is divided into three sections: findings, literature, method used, results, and discussion.

STATEMENT

For more than four years, we have been accompanying a patient suffering from cerebral palsy at the CNRPH in Etoug-Ebé. This institution takes in children, teenagers, and adults with multiple disabilities. It is made up of educators specializing in physiotherapy, orthopedics, and psychomotricity, whose role is to detect, re-educate, rehabilitate, and functionally explore vision disorders. In short, they are specialists, each contributing his or her specialty to the rehabilitation of disabled children. Given the seriousness of our subject's disability (cerebral palsy), the time taken to rehabilitate him, and the slow rate of improvement, we asked the physiotherapist if children with cerebral palsy had access to school, by law no. 2005-102 of 11 February 2005 on equal rights and opportunities, participation, and citizenship for people with disabilities. She replied in the affirmative, pointing out that there was a specialized and inclusive school for disabled pupils.

So out of curiosity, we went there and met the class teacher. She allowed us into the classroom. While we were there, we noticed that children with cerebral palsy in ordinary classes are inattentive, passive, sleep as they please, play, and don't take part in learning. In fact, after evaluation, we find that out of 20 IMC students, only 2 can get a mark of 10 or above and the rest below 9, i.e. a percentage of 10% pass and 90% fail. This is due to the learning content and, in particular, the adaptive teaching practices, which are not geared to the needs of the pupils. School performance here is expressed much more in terms of competence. Going from 0 to 6, from 9 to 12, or from 14 to 17 is sometimes a real feat.

LITERATURE

During our placement at the CNRPH D'Etoug-Ebe, we noticed at the inclusive school that many children with multiple disabilities were not interested in lessons, particularly those with cerebral palsy (CP). Our focus is much more on the latter. We have observed that during the teaching/learning periods, very few children with cerebral palsy follow the activities; during these activities, very few are those who are interested in the school activities, yet in the theory of constructivism, Piaget (1960) emphasizes that during teaching, the child is placed at the center of the activities and must participate in the construction of his knowledge. Given that the majority of children with cerebral palsy are not predisposed to do what the theory requires, given their disability and the degree of their impairment, during activities, children with cerebral palsy do not adjust or adapt and are far from assimilating. This is why we are carrying out this research to find the most effective ways of helping these children to adjust and develop their performance at school. Children with cerebral palsy (aged 6 to 15) are the ones who deserve special attention and close monitoring by their teachers once they start school. With this in mind, René H. (1958) stresses in the literature that the primary role of the teacher or specialized educator is to ensure a committed presence close to the pupil by offering a pedagogy of restitution and liberation so that the subject finds or

rediscovers his or her potential. Indeed, children with multiple disabilities throughout the world, particularly in Cameroon, are the ones who still suffer the trauma of parents who consider them to be down on their luck. Nguimfack L (2016) says that the patient is not an isolated entity, but part of a family environment in which he or she acts and is acted upon. Their suffering extends beyond their biological system to their psyche. This is why families still lock them up in their homes, even though certain legislative measures have been taken to ensure that they attend school.

The latest household survey carried out in 2007, revealed the following figures: 10% of the Cameroonian population has a disability. Around 5% of disabled children go to school and less than 2% of these children complete secondary education. Nearly 90% of disabled people cannot read or write, i.e. more than 1,500,000 out of 1,787,320 people living with a disability. In addition, 80% of disabled people aged between 15 and 64 are unemployed, due to their lack of education and the lack of practices for adapting teaching to the needs of children.

Adapting teaching practices

Nootens and Debeurme (2010) describe teaching adaptation practices as "the set of situated and singular acts of the teacher, and the meanings that the teacher gives to them, acts performed both in planning, (...) intervention and evaluation (...), which aim to adjust teaching to the particular needs of the pupil in difficulty" (p.133). These authors adopt a position that is described as inclusive: an adaptation may concern students with cerebral palsy mainly based on their experiences and needs, but it may also be used for all the students in the class and thus benefit everyone; this is what is called a general adaptation. Similarly, an adaptation may be aimed solely at one or more students with difficulties; this is known as a specific adaptation.

This position reflects the need to study teaching adaptation practices from the angle of gestures (according to Debeurme (2002), the term gesture is both routine and adaptation. In the context of teaching practice, it is directed towards others and involves an element of adjustment), the aids and interventions that constitute adjustments to the teacher's practice, whether concerning all the pupils in the class, including pupils with multiple disabilities who may benefit from these adjustments, or more specifically about pupils with cerebral palsy, depending on their experience and their particular needs.

Gestures, aids, and interventions that constitute adjustments to practice

According to Gombert and Roussey (2007), practices for adapting teaching encompass a set of "adaptive gestures" relating to the teacher's assistance and interventions with pupils with difficulty or with multiple disabilities, which are "ways of doing things, pedagogical modifications, specific arrangements (...) relating to the care of these pupils" (p.238).

These gestures are defined by the notion of the proximal zone of development (Vygostky, 1978) and that of scaffolding, borrowed from Bruner (1983), i.e. "all of the assistance provided by the adult enabling the child to learn to organize his behavior so that he can solve on his own a problem that he did not know how to solve at the outset" (Bruner, 1983). The work of (Gombert and Roussey, 2007) has led to the development of a typology of adaptive gestures grouped into different categories. It should be noted that the examples given are based on an analysis of the declared practices of teachers working with severely dyslexic and cerebrally ill pupils in ordinary classrooms.

METHOD

Participants and study area

The Centre National de Réhabilitation des Personnes Handicapées Cardinal Paul Emile Leger (CNRPH) is a public administrative institution with legal personality and financial autonomy. It is geographically located in the Centre region, more precisely on the western outskirts of the city of Yaoundé, in the Mfoundi department, Yaoundé VI district, Etoug-Ebé district. It was founded in 1971 by a prelate of Canadian origin, Cardinal Paul Emile Leger. It was inaugurated by the President of the Federal Republic of Cameroon, His Excellency EL HADJ AMADOU AHIDJO, as a private social worker. In the beginning, this social work was called "Centre de rééducation de Yaoundé" (CRY). In 1978, the CRY was transferred to the Cameroonian State under the name of "Centre National de Réhabilitation des Handicapés" (CNRH) as a specialized institution of the Ministry of Social Affairs.

In 2009, the CNRH was transformed into a public administrative establishment by Decree No. 2009/096 of 16 March 2009, which created, organized, and operated the Cardinal Paul Emile Leger National Centre for the Rehabilitation of People with Disabilities (CNRPH), extending its remit to include comprehensive care for all categories of people with disabilities.

The center's initial mission was to rehabilitate children suffering from poliomyelitis, meningitis, and congenital malformations. This mission was later extended to include the care of people with physical and motor disabilities. Since the decree of 16 March 2009, new missions have been assigned to the comprehensive care of all types of disability. These include, for example, psychosocial care for people with disabilities and their families, medical and health care for people with disabilities, apprenticeships, training, and socio-professional retraining for people with disabilities.

The CNRPH targets all disabled people and their families. They include people with physical and motor disabilities, people with sensory disabilities, people with mental disabilities, people with social disabilities, and the families of people with disabilities. The CNRPH has several departments and services, including:

- The General Medicine, Pharmacy and Examinations Department;
- The multi-purpose functional disability surgery and anesthesia department and the multi-purpose functional rehabilitation and orthopedic-fitting department

The special and inclusive education department

Under the authority of a Head of Department, the Special and Inclusive Education, Sport, and Activity Department is responsible for developing appropriate educational techniques for people with special educational needs, for general and technical education adapted to children with special educational needs, for setting up special education modules for the hearing impaired, the visually impaired and the mentally impaired, and for organizing sport and leisure activities for people with special educational needs. This department has three offices:

- The Special Education Office;
- The Inclusive Education Office;
- The cultural and sports activities office.

About the activities of this service, we were particularly interested in special and inclusive schools. We found that psychosocial support is provided by a psychologist and a social worker. The school's other responsibilities include welcoming pupils and their parents, interviewing and listening to them, individual psychological guidance, and academic, psychological, and social monitoring;

We have several qualified professionals, including specialist teachers, psychomotor therapists, psychologists, physical education teachers, social workers, occupational therapists, and psychomotor therapists.

The role of these professionals is to ensure that the service runs smoothly and achieves its objectives.

The special school provides medical, social, academic, and psychological care.

At the inclusive school, there are both normal and abnormal children. We observed that each child in the school was specific. The school aims to see the individual specificities of the children to develop individual educational projects. The school is also concerned with identifying each child's abilities and developing teaching practices adapted to their level. In other words, knowing how to guide them and teach them what they need to know. At the CNRPH special school, the children are socialized, rather than being turned into graduates, specifically IMC pupils. The greatest benefit is to ensure that severely handicapped children with cerebral palsy are autonomous and not useless in life.

Participants

This is the set of individuals who meet the general criteria of the study. We called on pupils for a quantitative study, but as they were unable to read, the questionnaire was read to them so that they could

give us information by ticking only the box that suited them. Our target population was, therefore, all the pupils in the CNRPH's specialized and inclusive schools.

We chose these establishments because they have a large number of children with disabilities, particularly those with cerebral palsy.

TABLE 1: Presentation of the accessible population for the questionnaire survey of IMC students.

Establishments	Workforce	Percentage (%)
The specialized school	70	33,33
Inclusive schools	50	23,80
E.P Mendong	30	14,29
PROMHANDICAM	40	19,05
CEJARC	20	9,53
Total	210	100,0

In this accessible population of 300 pupils, the special school is represented by 100 pupils or 33.33%, the inclusive school by 70 pupils or 23.33%, E.P Mendong by 40 or 13.33%, PROMHANDICAM by 60 or 20% and CJARC by 30 or 10%.

Sampling technique

These are the techniques used to extract individuals from the accessible population to be included in the study sample. For the quantitative study, the two techniques used are simple random sampling and selection by resonant choice.

Using simple random sampling, we were able to use an innocent hand to draw certain classes from the range of paper scraps available to us.

The purposive sampling technique then enabled us to persuade pupils from the various classes selected to take part in our survey project. The voluntary respondents from the purposive sampling are shown in Table 5. A total of 210 pupils with cerebral palsy, representing 70% of our accessible population of 300 pupils with cerebral palsy.

To select our participants, we used simple random sampling. Our respondents were voluntary pupils from the classes represented in the table below.

TABLE 2: Presentation of the questionnaire survey sample.

Establishments	Boys	Girls	Workforce	Population Accessible	Percentage of accessible population
The specialised school	35	20	55	70	26,2
Inclusive schools	20	15	35	50	16,66
E.P Mendong	10	15	25	30	11,9
PROHANDICAM	15	10	25	40	11,9
CEJARC	4	6	10	20	4,76
Total	118	92	150	210	71,42

This sample of 150 students, or 71.42% of the accessible population, enables us to carry out an exploratory study because it allows us to conclude. As Amin (2005) points out, the sample must be close to the accessible population for reasons of representativeness and reliability. We gave 150 self-administered questionnaires to pupils and 150 pupils were able to respond with the help of their teachers, giving a response rate of 100%. Based on

this sample, we calculated the sampling rate using the following formula: $T_s = \text{sample} \times 100/N$. This gives us a sampling rate of 71.42%. Apart from the fact that our sample is close to the accessible population, the sampling rate of 71.42% is well above the critical threshold of 20%. This allows us to say that our sample is well representative of our accessible population and that our results can therefore be generalized to it.

PRESENTATION OF RESULTS

The results are presented in the form of tables

TABLE 3: Distribution of participants according to satisfaction with professional gestures as the best strategies for facilitating the development of performance in pupils with cerebral palsy.

Q1. Are the teacher's professional gestures always the best strategies for facilitating the development of your performance?		Workforce	Percentage	Valid percentage	Cumulative percentage
Valid	No answer	2	1,3	1,3	1,3
	Always	97	64,7	64,7	66,0
	Often	40	26,7	26,7	92,7
	Sometimes	2	1,3	1,3	94,0
	Rarely	8	5,3	5,3	99,3
	Never	1	,7	,7	100,0
	Total	150	100,0	100,0	

This table shows that the vast majority of respondents believe that teachers' professional actions are always the best strategies for helping IMC improve their performance at school. This was the view of 91.4% of participants. Taken in isolation, the data show that 97 subjects, or nearly 64.7%, said

they "always" agreed with this opinion, while 26.7% of participants said they "often" did. This proportion is followed by 5.3% of participants who 'rarely' agree. The analysis shows, however, that almost 1.3% of participants say they 'sometimes' agree with this view and .7% say they 'never' do.

TABLE 4: Breakdown of participants according to their level of engagement in learning, with a presentation of the content and teaching aids adapted to promote the empowerment of pupils with cerebral palsy.

Q2. How involved are you in the learning process when the teacher presents you with content and adapted teaching aids that encourage you to become independent?		Workforce	Percentage	Valid percentage	Cumulative percentage
Valid	No answer	3	2,0	2,0	2,0
	Very high	97	64,7	64,7	66,7
	High	39	26,0	26,0	92,7
	Undecided	3	2,0	2,0	94,7
	Low	7	4,7	4,7	99,3
	Not at all high	1	,7	,7	100,0
	Total	150	100,0	100,0	

The distribution of participants in this table shows a high frequency of those who agreed that their level of engagement was accepted during learning when the teacher presented the adapted content and teaching aids that encouraged the empowerment of IMC pupils. Thus, the table shows that 90.7% of the overall weight of the sample of participants whose apprehension about having a good level of engagement is dominant is representative. Taken in isolation, the data shows that 64.7% of participants rate their level of commitment as 'very high', compared with 26% of those who simply rate it as 'high'.

This trend is followed by those who are embarrassed and those who rate their level of commitment as 'low', each with a 4.7% representation rate. On the other hand, the analysis shows a group of students whose level of commitment is judged insufficient or not at all acceptable when the teacher presents the appropriate content and teaching materials. This group represents 2% of the students whose level is judged to be "undecided" and 7% of those whose level is judged to be "not at all high".

TABLE 5: Distribution of participants according to the degree of reaction of IMC pupils to the presentation of lesson content aimed at developing their performance.

Q3. How do you react in class when the teacher presents you with lesson content designed to develop your skills?		Workforce	Percentage	Valid percentage	Cumulative percentage
Valid	No answer	2	1,3	1,3	1,3
	Very high	97	64,7	64,7	66,0
	High	43	28,7	28,7	94,7
	Undecided	3	2,0	2,0	96,7
	Low	4	2,7	2,7	99,3
	Not at all high	1	,7	,7	100,0
	Total	150	100,0	100,0	

From the point of view of the data contained in this table, the observation on the degree of reaction, when the teacher presents the content of lessons aimed at developing IMC skills, shows that the vast majority of participants think that their level of reaction is generally good. According to the table,

64.7% said they had a "very high" level of reaction, while 28.7% (43 out of 150 subjects) had a "high" level. However, observations show that 2.7% of subjects had a "low" level of reaction, while 2% were "undecided" and 7% said they had a "not at all high" level of reaction.

TABLE 6: Distribution of participants according to the level of engagement of IMC pupils when the teacher conducts the lesson at their own pace.

Q4. What is your level of commitment when the teacher conducts the lesson at your learning pace?		Workforce	Percentage	Valid percentage	Cumulative percentage
Valid	No answer	2	1,3	1,3	1,3
	Very high	87	58,0	58,0	59,3
	High	42	28,0	28,0	87,3
	Undecided	13	8,7	8,7	96,0
	Low	3	2,0	2,0	98,0
	Not at all high	3	2,0	2,0	100,0
	Total	150	100,0	100,0	

The table above shows the level of engagement of IMC students when the teacher conducts the lesson at their own pace. The distribution of participants in this table reveals a high frequency of those who positively valued their level of engagement. This proportion represents almost 86% of the sample. Nearly 58% of participants rated their level of

commitment as 'very high', while 28% simply rated it as 'high'. The analyses show that a large minority of participants (8.7%) consider themselves to be "undecided" and the remainder consider themselves to be "not at all high" and "not very high", with respective representativeness rates of around 2% each.

TABLE 7: Distribution of participants according to the reaction of pupils with cerebral palsy to the teacher's use of adapted teaching practices during lessons in an ordinary class in order to achieve the objectives set.

Q5. What level of reaction do you have when the teacher uses adapted teaching practices during lessons in an ordinary class to help achieve the objectives set?		Workforce	Percentage	Valid percentage	Cumulative percentage
Valid	No answer	2	1,3	1,3	1,3
	Very high	71	47,3	47,3	48,7
	High	35	23,3	23,3	72,0
	Undecided	3	2,0	2,0	74,0
	Low	10	6,7	6,7	80,7
	Not at all high	29	19,3	19,3	100,0
	Total	150	100,0	100,0	

From the point of view of the data contained in this table, the observation on the level of reaction when the teacher uses adapted pedagogical practices when teaching in a regular class to achieve the objectives set shows that the vast majority of the participants believe that their level of reaction is generally good. Referring to the table, we can see that 47.3% said they had a "very high" level of reaction, while this level was simply "high" for 23.3%, i.e. 35 subjects out of 150. However, observations show that 19.3% of subjects were "not at all high", i.e. 29 participants out of 150, compared with 6.7% who were "not very high", i.e. 10 participants out of 150, and 2% who said they had an "undecided" level of reaction, i.e. 3 participants out of 150.

Hypothesis testing

First stage: formulation of the alternative hypothesis (Ha) and the null hypothesis (Ho).

Ha: The self-perception of adaptive teaching practices in the ordinary classroom has a significant impact on school performance as an adjustment capacity in pupils with cerebral palsy from the CNRPH of Etoug-Ebé and PROMHANDICAM.

Ho: the perception of teaching practices in the ordinary classroom does not have a significant impact on school performance as an adjustment capacity in pupils with cerebral palsy at the CNRPH in Etoug-Ebé and PROMHANDICAM.

The second stage: is the presentation of contingency tables between the variables in our research hypotheses. For each of them, this stage will give us a cross-tabulated table comprising one item on the experience of school activities in terms of didactic tools adapted in an ordinary situation and another on performance. In the case in point, these are items Q9 and Q12, on the understanding that for each item linked, Ha is verified and confirmed.

TABLE 8: Cross-tabulation of HR2.

Q10. Does the use of adapted learning materials have a positive influence on your performance at school?		Q33. How well do you perform when the teacher selects content according to your needs and interests?						Total
		No answer	Very high	High	Undecided	Low	Not at all high	
No answer	Workforce	0	0	1	0	0	1	2
	Theoretical headcount	,0	1,3	,5	,0	,0	,1	2,0
Always	Workforce	1	62	11	0	0	3	77
	Theoretical headcount	1,0	49,8	21,0	1,5	1,0	2,6	77,0
Often	Workforce	0	23	21	1	1	1	47
	Theoretical headcount	,6	30,4	12,8	,9	,6	1,6	47,0
Sometimes	Workforce	1	10	2	0	0	0	13
	Theoretical headcount	,2	8,4	3,6	,3	,2	,4	13,0
Rarely	Workforce	0	1	6	1	1	0	9
	Theoretical headcount	,1	5,8	2,5	,2	,1	,3	9,0
Never	Workforce	0	1	0	1	0	0	2
	Theoretical headcount	,0	1,3	,5	,0	,0	,1	2,0
Total	Workforce	2	97	41	3	2	5	150
	Theoretical headcount	2,0	97,0	41,0	3,0	2,0	5,0	150,0

The third stage: presentation of the results of the various calculations carried out to arrive at the Chi-square statistical test 30 cells (83.3%) have a theoretical size of less than 5. The minimum theoretical number of cells is .03.

TABLE 9: Statistical test results Chi-square tests.

	Calculated value	Ddl	Asymptotic significance (bilateral)	Value read
Pearson Chi-square	82,547	25	,000	37,65
Likelihood ratio	53,847	25	,001	
Linear-by-linear association	2,851	1	,091	
Contingency coefficient	,596			
Pearson R	,138			
Spearman correlation	,248			
Number of valid observations	150			

Fourth stage: Decision

According to the Chi-square decision rule, we find that the calculated value (χ^2_{cal}) is greater than the value of the χ^2_{read} , i.e. $82.547 > 37.65$. This allows us to accept H_2 . Inferential analysis of the data shows that $\chi^2_{cal} > \chi^2_{lu}$. H_a is therefore accepted and H_0 is rejected. This implies that the variables (dependent and independent) in our hypothesis have a significant link. In other words, the self-perception of adaptive teaching practices in the ordinary classroom has an impact on the academic performance of pupils IMC of the CNRPH of Etoug-Ebé and PROMHANDICAM

MEANING AND EXAMINATION OF THE RESEARCH Hypothesis

The United Nations General Assembly adopted the Convention on the Rights of the Child in 1989. This Convention is now recognized almost universally. One of the fundamental principles of the Convention is that of the best interests of the child (art. 3). It is this principle that has guided all educational initiatives aimed at children. In this respect, the first three paragraphs of article 23 provide as follows: States Parties recognize that mentally or physically disabled children should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance, and facilitate the child's active participation in the community.

The State of Cameroon has continued the efforts of the international community by introducing standards to promote the development and inclusion of learners with disabilities. It thus guarantees a policy of protection, promotion of rights, and inclusion of people with disabilities. On this basis, a set of well-defined texts has been drawn up.

To this end, Act no. 2010-002 of 13 April 2010 on the protection and promotion of people with disabilities defines special education as "introducing physically, sensorily, mentally and multiply disabled people to appropriate communication methods to enable them to access normal schooling and, later, vocational training".

In addition, children with motor disabilities are admitted to mainstream schools, the main difficulty being access to school buildings and infrastructure, depending on the child's degree of disability. Generally speaking, following the regulations in force, primary school is compulsory and free.

However, with the liberalization of the education sector, which has led to the emergence of public schools, the principle of free education has been undermined, in particular, because of the scarcity of State subsidies and the high costs associated with the training of disabled pupils, which has essentially remained the preserve of private individuals.

Integrating a pupil with cerebral palsy into an ordinary class requires the development of appropriate practices to compensate for the effects of the disorder, for example by avoiding tasks that the pupil would not be able to perform. The purpose of these adaptive teaching practices is to enable them to overcome their difficulties. So, the first help to be given is that which the teacher provides in the classroom by implementing differentiated teaching methods (Peslouan and Rivalland, 2003). In this respect, the first observation that can be made from the results is that all the teachers involved in this experiment, whatever their level of commitment, say they use differentiated teaching or adaptive teaching practices to help integrated pupils overcome their difficulties.

In terms of job satisfaction, 64.7% of the subjects in our study claimed to have a very high level of inclusion and academic performance. This reaction from the students was also confirmed. Here, the expectation was that the self-perception of adaptive teaching practices in the ordinary classroom had a significant impact on the academic performance of pupils with cerebral palsy. In line with our expectations, the degree of influence found between these two variables was strong. The Pearson correlation coefficient calculated gave 0.582. Inferential analysis of the data shows that $\chi^2_{cal} > \chi^2_{lu}$ i.e. $76.952 > 37.65$. This implies that the variables (dependent and independent) in our hypothesis have a significant relationship. This allows us to accept research hypothesis H_4 . In other words, the self-perception of adaptive teaching practices in the ordinary classroom had a significant impact on performance in terms of the ability of IMC pupils to adjust to school inclusion.

In support of these theories, the theory of motivation by Miller, Gallanter and Pribram (1960) explains that the teacher sets goals and, based on these goals, develops a technique to achieve them. This theory also states that pupils will be motivated if, during learning activities, the teacher presents attractive

teaching aids that capture the pupils' attention. At this level, it stimulates children to think differently about the importance of each level of adaptive practice in their current and future projects. Of course, at this level it is also a question of knowing that the self-perception of adaptive teaching practices should facilitate social integration. To achieve this, the content must be based on specific programs and adapted to pupils with severe disabilities, but even more so on the needs and interests of the pupils themselves. In the school context, it is stipulated that the adaptation by teachers of their teaching practices is a *sine qua non* condition for dealing with pupils with disabilities. These modifications/adjustments, which are designed to compensate for the various difficulties encountered, must be set out in the pupil's personalized education plan. However, establishing a legislative framework for integrating disabled pupils into mainstream classes is not enough. Teachers still have real difficulties in dealing with this type of pupil. There are at least two aspects worth highlighting in this regard. This issue must be addressed if we want to make these essential links possible and effective. In addition, taking into account the diversity of all pupils, as well as the particularity of a disability which can sometimes be severe, requires the teacher to identify invariants specific to certain teaching methods which can be used by the whole group. At the same time, they need to bear in mind that pupils with disabilities or cerebral palsy are unlikely to be able to do everything the same way as their peers, which means that they need to adapt to their cognitive skills, based on individualized learning (Glsman, 2003).

Differentiated teaching must also be based on the skills to be developed by the pupils. This is why Roegiers (2006, p.7) asserts that the self-perception of adaptive teaching practices in ordinary classes by pupils with disabilities should enable them to acquire the knowledge, know-how, and interpersonal skills that contribute to their empowerment and help them to solve everyday problems. Vatier (2009, p.29) also argues that the skills that pupils gradually develop depend on the development of the individual education plan, the teaching principles and strategies proposed, and the objectives of the personalized activities. They will thus be motivated if they realize that the self-perception of the proposed adaptive teaching practices enables them to feel proud, to flourish, to socialize, to become autonomous, and to solve life's problems based on the performance and even skills they have developed.

Each child has his or her way of perceiving adaptive teaching practices in the ordinary classroom. That said, this perception may be negative depending on the pupil's advanced age (Eccles, 1993). Similarly, as they get older, they understand and interpret better the assessments that others make of them during learning activities; as a result, they become more realistic in their assessment. If students perceive their chances of failure, they may decide not to engage in the task to avoid jeopardizing their self-esteem.

The student's strategy will therefore be to avoid failure so as not to affect his perception of competence. For students with low self-esteem, experiencing failure can reinforce and make evident their negative self-perception, reducing their self-esteem even further. This is why failures experienced by IMC students who already have low self-esteem are often more damaging. As a result, Wigfield and Eccles (2000) suggest that students may underestimate the value placed on the task to maintain positive self-esteem.

Another level of self-perception of teaching practices must also be directed towards the personalized objectives targeted. It would be unpleasant for pupils with cerebral palsy to receive teaching content that has nothing to do with their personalized objectives. As Bessala (2005) points out, each personalized objective must include a certain amount of content for better learning and assessment. Adapted learning takes account of children's needs, interests, and, above all, their age. In Piaget's theory of constructivism, he states that in learning, the age and stage of development of children must be taken into account. Each stage corresponds to a specific teaching method, and this teaching method also depends on the child's stage of intellectual development. For example, a child with cerebral palsy who is 15 years old and in fourth grade has the same level of intellectual development as a 10-year-old in the same class. This means that they are 5 years behind and require special attention from their teachers.

Furthermore, in socio-constructivism, Vygotsky (1985) states that "the only valid learning during childhood is that which anticipates development and makes it progress", i.e. there is no age for educating children, especially those with disabilities. Jérôme Seymour Bruner states that "the educational process requires a structure of knowledge in a coherent whole, to facilitate its encoding" At this level, we understand that this process depends on the self-perception of adapted teaching practices that can motivate the child during learning so that he develops new skills that facilitate his autonomy. These are represented by behavioral factors (choosing an activity, engaging in it, and persevering with it). The main indicators are choice of activity, perseverance, and commitment.

Viau (1997) also considers the perception of the value of the activity as the judgment a student makes about the usefulness of a proposed activity while aiming for a given goal. This is what Levy-Leboyer (1999) calls instrumentality, which is the link between the individual's efforts and what he or she could get out of them. On the one hand, students remain demotivated when faced with a project or activity that they consider pointless. On the other hand, the goals are of great interest in ensuring that the student values the activity and perceives its importance. He also considers the perception of the pupil's competence as (self-efficacy) another determining factor.

In this respect, Boustouane (1986) points out that this perception is a central notion in Bandura's theory (1986). A person's perception of his or her abilities largely determines his or her behavioral pattern. Viau (1997) therefore drew on the work of Bandura (1986) and Schunk (1991; 1990, 1987) to define the perception of competence as a student's judgment of his or her ability to perform a task. This perception has its origins in individual performance: observation of the performance of an activity by others: persuasion and the physiological and emotional reactions that the student may experience when performing a task. It is important to point out that a low perception of competence harms student performance, which can lead to failure. Chaduc et al (1999) refers to this as a positive representation of the task. Furthermore, Viau (1997) includes another determinant in the perception of the controllability of the task. This is the degree of control the student thinks he has over the task. In his work, Boustouane (2006: 54) defines the perception of controllability as "the perception of control that the student believes he has over the progress and consequences of a learning activity". According to the author, this perception is represented by the degree of control that a student can exercise over the progress of a task and the results obtained from it. This perception enables students to apply themselves to the subject and make links between the elements studied. However, those with little control are content to simply memorize. The majority of research on school motivation, as noted by the same author, considers that this perception comes from two kinds of representations: "the perception of one's skills" and "attributional perceptions".

CONCLUSION

This study aimed to examine and understand how the self-perception of adaptive teaching practices can have a significant effect on school performance as a capacity for adjustment in children with cerebral palsy. Therefore, from the outset, we asked ourselves the question of how self-perception can affect academic performance as an ability to adjust in children with cerebral palsy.

The questionnaire we sent to CNRPH pupils with cerebral palsy, based on statistical tables, enabled us to identify some very important concepts, such as group work, peer support, and the development of a personalized educational plan. Our study shows that the selection of content based on the needs of pupils, the use of adapted teaching materials, the development of appropriate techniques and strategies, compliance with instructions, and the pace of learning are all strong factors that facilitate the development of academic performance as an adjustment capacity in pupils with learning difficulties, followed by adaptive teaching practices. In fact, our results show that the self-perception of adaptive teaching practices in the ordinary classroom has a significant effect on academic performance as an ability to adapt in children with cerebral palsy.

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