Processes of Social Self-Comparison in Pupils with Disabilities and The Belief of Self-Efficacy

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ABSTRACT

This research aims to examine the relationship between the processes of social comparison of the self and the belief in self-efficacy in pupils with disabilities. This research is part of a social cognitive approach and is based on the theoretical foundations of Festinger (1954) and Bandura (2006) with the theory of social comparison and the theory of belief in self-efficacy. Data was collected in two phases. The qualitative survey consisted of in-depth individual interviews with 06 pupils with disabilities using accidental sampling techniques. The second phase was made possible by using a questionnaire as a data collection tool. The questionnaire was administered to a sample of 214 participants selected using quota sampling methods. The participants were students with disabilities regularly enrolled at CNRPH Emile Léger, PROMHANDICAM and CJARC. The research hypotheses were confirmed. This confirms the existence of a link between the processes of social self-comparison in pupils with disabilities and the belief in self-efficacy.

Keywords: process; social comparison; self-belief; self-efficacy; disabled student

INTRODUCTION

The education of people with disabilities has been a major concern for many countries for more than two decades (UNICEF, 2015; Handicap International, 2014; UNESCO, 1994; Convention on the Rights of Persons with Disabilities, 2006, WHO, 2015). Given the growth in this population, several strategies have been put in place to facilitate their access to schools (Gardou, 2012). Despite these efforts, it is clear that in Yaoundé's inclusive primary schools, they are virtually absent. Pupils with disabilities still do not seem to be aware of their place in the classroom. In Yaoundé's inclusive schools, this group is the most likely to drop out of school, repeat grades and perform poorly at school. For this reason, we asked these pupils about their ability to believe that they would succeed in integrating into the school environment. They identified many difficulties arising from the accessibility of infrastructure, teaching and interaction in inclusive school environments. As a result, the lack of belief in self-efficacy was highlighted as one of the major problems in inclusive education for pupils with disabilities.

THEORETICAL FRAMEWORK
1. The belief in self-efficacy among pupils with disabilities

Belief in self-efficacy is the anticipation and judgement of an individual's ability to achieve a certain level of performance in a given situation (Bandura, 1986).

A belief in self-efficacy helps to determine what an individual is capable of doing. Students with disabilities spare no effort in coping with their environment. The environment must indeed be adapted to the needs of pupils with disabilities (Thomazet, 2012), but they must also be able to act on their environment by taking additional actions that enable them to set the tasks they need to succeed. The individual must be an actor capable of transforming his environment (Galand and Vanlede, 2004).

Based on the various sources of belief in self-efficacy, we would have expected that, in an inclusive school environment, pupils with disabilities would draw on their schemas, learning or rewarding events from their past and repeat them. However, in the past, the parents or siblings have never been to school, or they are the majority of pupils who come to school for the first time as disabled pupils. In their environment, it is difficult to see a disabled student going to school.

We would also expect these pupils to have social models that they observe and imitate in order to succeed in the various areas of education. However, in this context, there is a virtual absence of role models among people with disabilities who are integrated into inclusive schools as teachers or in other administrative or public service functions. This further inhibits their belief in self-efficacy.

Verbal persuasion takes the form of suggestions and encouragement, emphasizing that the person has the ability to perform particular tasks successfully.

People who receive temporary assistance can gain self-confidence and be persuaded that they have the abilities required to master difficult situations. However, in these schools, pupils with disabilities tend to experience discriminatory and stereotypical behaviour from their able-bodied peers and teachers. The belief in self-efficacy is also influenced by the messages addressed to the learner: support, criticism, encouragement, advice, expectations, etc. (Galand and Vanlede, 2004).

Physiological activation in stressful or testing situations is a sign of vulnerability to dysfunction. Disabled pupils sometimes explain their fatigue, aches and tensions as indicators of a belief in physical self-efficacy. We therefore address the issue of the belief in self-efficacy among pupils with disabilities about the processes of social comparison of the self as an explanatory factor. This study is being carried out in the field of educational psychology, a field par excellence for achieving the desired objectives.

2. Social Self-comparison processes in pupils with disabilities

To assess their intellectual abilities, individuals turn to their peers. If the individual realizes that his reference group has opinions or aptitudes that are far removed from his own, he will try to reduce these differences. According to Festinger (1954), there are three completely different ways of doing this: they can try to get closer to these individuals, they can try to get others closer to them, or they can reduce their field of reference even further.

The field of comparison refers to the set of individuals with whom the subject can potentially compare him/herself. Social comparison is a cognitive process applied to one or more items of information concerning one or more people which makes it possible to appreciate the similarities and/or differences between oneself and others (Festinger, 1954). Social comparison therefore refers to the process by which individuals evaluate their opinions and abilities concerning others. More precisely, in situations where the individual is unsure of the accuracy of his opinions or the quality of his skills, he makes a comparison to obtain an estimate, but also to adjust to ambient norms. The process of social comparison is triggered by a state of uncertainty and aims to re-establish certainty and thus achieve a state of equilibrium. To evaluate their opinions or behaviours, people will make comparisons with others who excel in the field or who are less good than them.

According to Festinger (1954), individuals do not always have an objective basis (i.e. they sometimes cannot refer to "*physical reality*") for evaluating their opinions or certain of their abilities. In this case, the only means of comparison is "*social reality*", i.e. consensus. If his opinion is shared, he will conclude that it is valid; similarly, if his abilities are appreciated by others (or if they are correctly situated with the abilities of others), he will conclude that they are satisfactory. Social comparison is said

to have a central character and an adaptive value in human social life, and the need to compare oneself with others is said to be a "phylogenetically ancient and biologically powerful phenomenon that is recognizable in many species" (Dijkstra, Gibbons, & Buunk, 2010; Gilbert, Price, & Allan, 1995). The need to compare oneself is said to reflect several types of motivation: comparison as a response to the need for self-evaluation, as a reference point for self-improvement and to enhance the self (Gibbons, & Buunk, 1999; Wayment, & Taylor, 1995; Wood, 1989). Social comparison is distributed along two independent dimensions: differentiation and identification (Van Der Zee, Buunk, Sanderman, Botke, & Van Der Bergh, 2000). Several directions of social comparison are put forward: the person can compare themselves in an ascending, descending or lateral manner (similar target). A distinction is made between internal and external comparisons. This operationalization makes it possible to address the bottom-up and top-down nature of the identification (internal comparisons) and differentiation (external comparisons) of children with disabilities in inclusive classes. The effects of social comparison do not depend solely on the direction of the comparison, but on how the individual interprets the information resulting from the social comparison (Dijkstra, Kuyper, Van Der Werf, Buunk, & Van Der Zee, 2008).

2.1 Internal comparisons

Internal comparisons concern members of the same group. For this type of comparison, we have bottom-up identification and top-down identification. Identification corresponds to the fact of taking into account a model of comparison of oneself on an internal level (i.e. comparison with oneself, doing better or worse than before).

Buunk and Ybema (1999) hypothesise that there is a unidirectional upward movement aimed at improving oneself and one's skills. The need for self-improvement, on the other hand, originates in a more specific context and involves observing the expression of this need for self-improvement in situations where the self is threatened, particularly in stressful situations (Buunk, Cohen-Schotanus, & Van Nek, 2007).

In stressful situations, there is a stronger tendency towards top-down self-comparison, which can be seen in this context as a strategy for self-protection and self-preservation (Wills, 1981). It would seem that recourse to social comparison, whatever its direction, is a process that is largely involved in responding to the need for self-enhancement and self-improvement.

Comparison with an ascending target is associated with improvement, progression of self-esteem and self-assessment (Huguet, Dumas, Monteil, & Genestoux 2001; Wood, 1996). Comparison with an upward target involves comparing oneself with people who are more successful than oneself, while comparison with a downward target involves comparing oneself with people who are less successful than oneself.

2.2 External comparisons

External comparisons group together members of groups that are different from oneself. External comparisons are upward differentiation and downward differentiation. Differentiation refers to making a distinction between oneself and others (i.e. comparing oneself with others, doing better or worse than others).

On an affective level, upward social comparisons are traditionally associated with positive emotions such as optimism, admiration and pride, whereas downward social comparisons are often associated with emotions with a negative valence such as shame or anger (Buunk, & Ybema, 1997; Collins, 1996).

METHODOLOGY

This study was carried out among 214 pupils with disabilities, all of whom were attending the Paul Emile Leger National Centre for the Rehabilitation of People with Disabilities (CNRPH) in the Etoug Ebe district, the Promotion des Handicapés du Cameroun (PROMHANDICAM) in the Mimboman district and the Club des Jeunes Aveugles Réhabilités du Cameroun (CJARC). These schools are located in the heart of Yaoundé. This research is based on a mixed-methods approach (Creswell and Clark, 2018), i.e. using both qualitative and quantitative data collection and analysis tools in response to the research questions and objectives.

Quota sampling enabled us to obtain this sample from a total population of 496 pupils with disabilities. To obtain qualitative data and fill the quantitative gap, accidental sampling was used. An interview was conducted with 06 pupils with disabilities to gain an understanding of the different logic of social self-comparison. The questionnaire was constructed in the form of a table to allow these pupils with disabilities to get a better idea before selecting the box that best corresponds to their aspirations. We took the trouble to explain the codes that correspond to each of the boxes. To construct the questionnaire, we used the "Comparaison Sociale du Soi Scolaire" (CSSS) scale by Bouffard, Pansu, Boissicat, Vezeau, and Cottin (2014). It integrates the different aspects relating to the direction of the comparison, i.e. the ascending and descending directions with the differentiation and identification variables. Unlike the CSSS, which has 12 items, this research has 32 items. This was done to better reflect the day-to-day realities faced by students. The items are formulated as follows: for ascending differentiation, we have questions such as: "Compared to other able-bodied students who succeed, I am the most intelligent".

There are eight items. For downward differentiation, "Compared with able-bodied pupils who are not succeeding, I am afraid of becoming less good when I see others who are not doing as well as before", we also have eight items. Upward identification "When I compare myself to other successful disabled pupils, I am the most intelligent" comprises eight items. Top-down differentiation "Compared to able-bodied students who don't succeed, I'm afraid of becoming

less good when I see others who don't do as well as before" comprises eight items. Responses are rated on a five-point Likert scale ranging from A=totally true, B=true (moderately true), O=undecided (difficult to place), X=totally false and Y=false. Participants are asked to place themselves in each of these situations and to refer to their usual behaviour to give their level of agreement with each item. For each of the scale dimensions, internal consistency was satisfactory with α = 0.72, so ascending differentiation α = 0.70; and descending differentiation 0.69; for descending identification α = 0.68 and ascending identification α = 0.72. On the basis that nothing can be used haphazardly in research, we decided to test our research hypotheses using the Bravais-Pearson correlation index (r) as a data analysis tool. This is because our two variables (VI) and (VD) are quantitative, and we use this tool to explain the relationship or correlation between them for comparative purposes. Similarly, this tool also measures the strength of the link and the direction of the relationship between a variable X and a variable Y.

PRESENTATION AND DISCUSSION OF RESULTS

Social comparison of the self is divided into two groups: internal comparison, i.e. within the same group, and external comparison, i.e. between different groups. Internal comparison includes the following modalities: ascending identification, and descending identification.

1. Internal Comparison
1.1 Scores for bottom-up identification

TABLE 1: Distribution of scores according to whether I am the most intelligent compared with other successful pupils with disabilities.

Terms and conditions	Workforce	%
All the same, wrong	24	11,7
False	10	4,8
Undecided	40	19,5
All the same	56	26,1
Completely true	84	41,0
Total	**214**	**100,0**

Source: (Field Survey, 2024).

Looking at Table 1, out of a total of 214 pupils with disabilities, 84 participants felt that they were the most intelligent compared to other pupils with disabilities. This represents 41.0% of our sample. And 56 ESH lined up behind them by ticking the 'all the same true' box, i.e. a percentage of 26.1%. 24 participants, or 11.7%, disagreed with this statement. And 10 participants aligned themselves with these by ticking 'false'. In the undecided category, 40 participants (19.5%) did not make up their minds. They did not express an opinion. Pupil Fessi declared that he was always among the top five in his class and also outperformed the able-bodied. "*In the first term, I came first. Even in the other classes, I was in first place and I often received presents at the end of the year.*

TABLE 2: Distribution of scores according to whether, compared to successful pupils with disabilities, I always arrive at school on time.

Terms and conditions	Workforce	%
All the same, wrong	48	22,42
False	59	27,57
Undecided	17	7,94
All the same	39	18,22
Completely true	51	23,83
Total	**214**	**100,00**

Source: (Field Survey, 2024).

To successful pupils with disabilities, 59 participants, i.e. 27.57% of pupils with disabilities, answered "totally wrong" to say that they always arrive at school on time. And 48 participants, i.e. 22.42% of pupils with disabilities, knew that it was "false all the same" to say that they always arrived on time. 51 participants, i.e. 23.83% of pupils with disabilities, ticked "totally true" to imply that they always arrived on time. 39 participants, 18.22%, reinforced this response by using the "all the same true" option to show that they are always on time. 17 participants (7.94%) did not make a clear statement on the question. They were undecided.

1.2 Scores for top-down identification

TABLE 3: Distribution of scores according to whether, compared to underachieving pupils with disabilities, I'm afraid of getting bad marks when I see their performance drop.

Terms and conditions	Workforce	%
All the same, wrong	98	45,7
False	61	28,5
Undecided	00	00
All the same	20	9,3
Completely true	25	11,6
Total	**214**	**100,0**

Source: (Field Survey, 2024).

Looking at the following table, 98 pupils with disabilities, i.e. 45%, answered "all the same wrong". This means that the failure of one of their own does not mean that they will also fail, or that they cannot plan for their failure. 61 participants, or 28.5%, agreed with this assertion by ticking the "totally false" option. In the opposite camp, 25 participants, giving a percentage of 11.6%, i.e. when a similar person fails, they can also fail. 20 participants, i.e. 9.3%, agreed with the latter.

TABLE 4: Distribution of scores according to the fact that compared to pupils with disabilities who do not succeed, I am afraid of being less appreciated by teachers when I see others being belittled by the teacher.

Terms and conditions	Workforce	%
All the same, wrong	53	25,0
False	39	18,4
Undecided	36	17,0
All the same	45	20,3
Completely true	41	19,3
Total	**214**	**100,0**

Source: (Field Survey, 2024).

Compared with successful pupils with disabilities, 25.0% of ESH still found it untrue that they were less appreciated by teachers when they saw other pupils being belittled. 20.3% of ESH felt that it was true that they could be less appreciated by teachers when they saw others being belittled by the teacher. 19.3% of ESH were afraid of being less appreciated by teachers when they saw those who were succeeding being belittled. 17.0% of ESH were undecided. 18.4% of ESH were not afraid of being depreciated when they saw those who succeeded being depreciated by the teacher.

2. External comparison
External comparison includes: upward differentiation and downward differentiation

2.1 Scores for bottom-up differentiation

TABLE 5: Distribution of scores according to whether, when I compare my performance with other successful pupils in the class, I am the most intelligent.

Terms and conditions	Workforce	%
All the same, wrong	107	50,2
Totally false	56	26,3
Undecided	18	8,4
All the same	17	8,0
Completely true	15	7,0
Total	**214**	**100,0**

Source: (Field Survey, 2024).

Compared to the successful HSEs, 107 participants, or 50.2% of the HSEs, answered with "wrong" that they were not the most intelligent. And 56 participants, or 26.3% of HSEs, knew that they were not the smartest compared to other HSEs. 18 participants, or 8.4% of ESHs, were undecided. They did not express a clear opinion on the question. 17 participants, i.e. a percentage of 8.0%, replied that they were the most intelligent compared to other HSEs. 15 participants, i.e. a percentage of 7.0% of ESHs confirmed that they were the most intelligent. Fessi "I'm more intelligent than the other pupils in my class".

TABLE 6: Distribution of scores according to whether, when I compare myself with other successful pupils, I have more qualities (physical, intellectual) than faults.

Terms and conditions	Workforce	%
All the same, wrong	59	27,5
False	77	35,9
Undecided	15	7,1
All the same	24	11,2
Completely true	39	18,2
Total	**214**	**100,0**

Source: (Field Survey, 2024).

About the other successful pupils in the class, who think they have more physical qualities than faults, 69 participants, i.e. 33.5%, ticked the "totally false" option. This means that among the other successful students in the inclusive class, 33.5% thought that they did not have more qualities than faults. 59 participants, or 27.5%, ticked the "totally false" option. On the other hand, 39 participants, i.e. 18.2%, thought they had more qualities than faults. 24 participants, i.e. 11.2%, confirmed this by ticking the "all the same true" box. 15 participants, i.e. 7.1%, remained undecided. Siwé 10 years in class one thinks he has more physical qualities than the other pupils, but he has no intellectual qualities. Given his birthright, he manages to use it to gain the respect of his younger pupils.

When I compare myself to other successful students, I have more physical qualities than them. But I know I have fewer intellectual qualities. I'm just very hard on my classmates. They have to learn to respect me. I'm still their eldest. That's why I'm very violent. I can't stand it when they surpass me in everything.

3. Presentation of relative scores with downward differentiation

TABLE 7: Distribution of scores according to whether, compared to others who are not doing well, I am afraid of becoming less good when I see others who are not doing as well as before.

Terms and conditions	Workforce	%
All the same, wrong	29	13,5
Totally false	38	17,7
Undecided	10	4,6
All the same	66	30,8
Completely true	71	33,1
Total	**214**	**100,0**

Source: (Field Survey, 2024).

About other pupils in the inclusive class who were not doing well, 71 participants (33.1%) were afraid of becoming less good when they saw other pupils in the class who were not doing as well as before. 66 participants (30.8%) ticked the "all the same" box. On the other hand, 38 participants, or 17.7%, thought this was untrue. When these pupils with disabilities see other pupils in the inclusive class who are not succeeding, they are not afraid of becoming less good than before.

29 participants confirmed this assertion by ticking the "completely false" box. 10 participants were not clear on the question. They chose neither of the extremes.

TABLE 8: Distribution of scores according to whether, compared to other underachieving pupils in the inclusive class, I'm afraid of getting bad marks when I see their performance drop off.

Terms and conditions	Workforce	%
All the same, wrong	31	14,4
Totally false	28	13,0
Undecided	09	4,2
All the same	59	27,5
Completely true	87	40,6
Total	**214**	**100,0**

Source: (Field Survey, 2024).

Compared to the other students in the class who were not doing well, 87 participants, or 40.6% of the ESH, were afraid of getting bad marks when they saw their performance drop. All the same, 59 participants ticked the 'all the same true' box. This represents 27.5% of the participants in the sample. On the other hand, 31 participants ticked 'false all the same', indicating that, compared with other underachieving pupils in the inclusive class, they were not afraid of getting bad marks when they saw their performance fall. 28 participants agreed with them by choosing the "totally wrong" option. 09 participants were undecided. They chose neither extreme.

4. Analysis of Results

4.1 Link between bottom-up identification and belief in self-efficacy in pupils with disabilities
Research hypothesis n° 1 was formulated as follows: there is a link between bottom-up identification among pupils with disabilities and the belief in self-efficacy.

We formulate the null and alternative hypotheses as follows:

Ho: there is no significant link between bottom-up identification among pupils with disabilities and belief in self-efficacy.

Ha: there is a significant link between bottom-up identification among pupils with disabilities and the belief in self-efficacy.

For our study, we have chosen a margin of error of α = 5%. Given that we are studying the relationship between two variables, we will use the Bravais-Pearson correlation. The number of degrees of freedom is nddl = N-2 where N = total number in the final sample. So nddl = 214 -2 = 212. The number of degrees of freedom is therefore 212.

According to the second step, α = 0.05 and nddl = 212 from which r $(X_1 , Y)_{lu}$ is 0.19.

		Bottom-up identification	belief in self-efficacy
Bottom-up identification	Pearson correlation	1	,721**
	Sig (bilateral)		,000
	N	214	214
belief in self-efficacy	Pearson correlation	,721**	1
	Sig (bilateral)	,000	
	N	214	214

**. The correlation is significant at the 0.01 level (two-tailed).

The Pearson correlation coefficient is .721

Decision
- If the correlation calculated is greater than that tabulated, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- If the correlation calculated is less than the critical correlation, the alternative hypothesis (Ha) is rejected and the null hypothesis (H0) is accepted.

Comparison of the critical value with the value read.
We have r $(X_3 , Y)_{cal}$ = .721 and r $(X_1 , Y)_{lu}$ is 0.19. Hence /r (X_3 , Y) cal/ > /r (X_3 , Y) lu/. So rcal = .721 > r* = 0.19.

The value of the correlation calculated is therefore greater than that tabulated. Hence the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected.

Based on the above and with a margin of error of 5%, we can say that research hypothesis 1 (HR$_1$) is accepted, i.e. that there is a link between bottom-up identification among pupils with disabilities and belief in self-efficacy. The direction of the correlation is positive. The correlation coefficient is r $(X_3 , Y)_{cal}$ = 0.721 This coefficient indicates that the correlation is significant because it is between 0.60 and 0.80. The coefficient of determination between the two variables shows us that the link between bottom-up identification among pupils with disabilities and belief in self-efficacy is significant and positive. The coefficient of determination is r $(X_3 , Y))$ $^2_{cal}$ = $(0.721)^2$ = 0.51. This means that the relationship between bottom-up identification among pupils with disabilities and belief in self-efficacy is significant.

4.2 Link between top-down identification and belief in self-efficacy
Research hypothesis no.^{o} 2 was formulated as follows: there is a link between top-down identification among pupils with disabilities and the belief in self-efficacy.

We formulate the null and alternative hypotheses as follows:

Ho: there is no significant link between top-down identification among pupils with disabilities and belief in self-efficacy

Ha: there is a significant link between top-down identification among pupils with disabilities and the belief in self-efficacy.

For our study, we have chosen a margin of error of α = 5%. Given that we are studying the relationship between two variables, we will use the Bravais-Pearson correlation. The number of degrees of freedom is nddl = N-2 where N = total number in the final sample. So nddl = 214 -2 = 212. The number of degrees of freedom is therefore 212.

According to the second step, α = 0.05 and nddl = 212 from which r $(X_1 , Y)_{lu}$ is 0.19.

		Top-down identification	belief in self-efficacy
Top-down identification	Pearson correlation	1	,816**
	Sig (bilateral)		,000
	N	214	214
belief in self-efficacy	Pearson correlation	,816**	1
	Sig (bilateral)	,000	
	N	214	214

**. The correlation is significant at the 0.01 level (two-tailed).

The Pearson correlation coefficient is .816

Decision
- If the correlation calculated is greater than that tabulated, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- If the correlation calculated is less than the critical correlation, the alternative hypothesis (Ha) is rejected and the null hypothesis (H0) is accepted.

Comparison of the critical value with the value read.

We have r $(X_3 , Y)_{cal}$ = .816 and r $(X_1 , Y)_{lu}$ is 0.19. Hence /r (X_3 , Y) cal/ > /r (X_3 , Y) lu/. So rcal = .816 > r* = 0.19.

The value of the correlation calculated is therefore greater than that tabulated. Hence the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected.

Based on the above and with a margin of error of 5%, we can say that research hypothesis 2 (HR$_2$) is accepted, i.e. that there is a link between top-down identification among pupils with disabilities and belief in self-efficacy. The direction of the correlation is positive. The correlation coefficient is r $(X_3 , Y)_{cal}$ = 0.816. This coefficient indicates that the correlation is significant and strong because it is between 0.80 and 1. The coefficient of determination between the two variables shows us that the link between top-down identification among pupils with disabilities and belief in self-efficacy is highly significant and positive. The coefficient of determination is r $(X_3 , Y))^2_{cal}$ = $(0.816)^2$ = 0.66. This means that the relationship between top-down identification among pupils with disabilities and belief in self-efficacy is highly significant.

4.3 Link between top-down differentiation and belief in self-efficacy

Research hypothesis no.º 3 was formulated as follows: there is a link between top-down differentiation for pupils with disabilities and the belief in self-efficacy.

We formulate the null and alternative hypotheses as follows:

Ho: there is no significant link between top-down differentiation among pupils with disabilities and belief in self-efficacy

Ha: there is a significant link between top-down differentiation for pupils with disabilities and the belief in self-efficacy.

For our study, we have chosen a margin of error of α = 5%. Given that we are studying the relationship between two variables, we will use the Bravais-Pearson correlation. The number of degrees of freedom is nddl = N-2 where N = total number in the final sample. So nddl = 214 -2 = 212. The number of degrees of freedom is therefore 212.

According to the second step, α = 0.05 and nddl = 212 from which r $(X_1 , Y)_{lu}$ is 0.19

		The reference framework for pupils with disabilities	belief in self-efficacy
Downward differentiation	Pearson correlation	1	,675**
	Sig (bilateral)		,000
	N	214	214
belief in self-efficacy	Pearson correlation	,675**	1
	Sig (bilateral)	,000	
	N	214	214

**. The correlation is significant at the 0.01 level (two-tailed).

The Pearson correlation coefficient is .675

Decision
- If the correlation calculated is greater than that tabulated, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- If the correlation calculated is less than the critical correlation, the alternative hypothesis (Ha) is rejected and the null hypothesis (H0) is accepted.

Comparison of the critical value with the value read.

We have r $(X_3 , Y)_{cal}$ = .675 and r $(X_1 , Y)_{lu}$ is 0.19. Hence /r (X_3 , Y) cal/> /r (X_3 , Y) lu/. So rcal = .675 > r* = 0.19.

Based on the above and with a margin of error of 5%, we can say that research hypothesis 3 (HR$_3$) is accepted, i.e. that there is a link between top-down differentiation among pupils with disabilities and the belief in self-efficacy. The direction of the correlation is positive.

The correlation coefficient is r $(X_3 , Y)_{cal}$ = 0.675. This coefficient indicates that the correlation is significant because it is between 0.60 and 0.80. The coefficient of determination between the two variables shows us that the link between downward differentiation among pupils with disabilities and the belief in self-efficacy is significant and positive. The coefficient of determination is r $(X_3 , Y))^2_{cal}$ = $(0.675)^2$ = 0.66. This means that the relationship between downward differentiation among pupils with disabilities and belief in self-efficacy is significant.

4.4 Link between bottom-up differentiation and belief in self-efficacy

Research hypothesis no.º 4 was formulated as follows: there is a link between bottom-up differentiation among pupils with disabilities and the belief in self-efficacy.

We formulate the null and alternative hypotheses as follows:

Ho: there is no significant link between bottom-up differentiation among pupils with disabilities and belief in self-efficacy.

Ha: there is a significant link between bottom-up differentiation for pupils with disabilities and the belief in self-efficacy.

For our study, we have chosen a margin of error of α = 5%. Given that we are studying the relationship between two variables, we will use the Bravais-Pearson correlation. The number of degrees of freedom is nddl = N-2 where N = total number in the final sample. So nddl = 214 -2 = 212. The number of degrees of freedom is therefore 212.

According to the second step, α = 0.05 and nddl = 212 from which $r (X_1 , Y)_{lu}$ is 0.19.

		Upward differentiation	belief in self-efficacy
Upward differentiation	Pearson correlation	1	,832**
	Sig (bilateral)		,000
	N	214	214
belief in self-efficacy	Pearson correlation	,832**	1
	Sig (bilateral)	,000	
	N	214	214

**. The correlation is significant at the 0.01 level (two-tailed).

The Pearson correlation coefficient is 8.32

Decision
- If the correlation calculated is greater than that tabulated, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected.
- If the correlation calculated is less than the critical correlation, the alternative hypothesis (Ha) is rejected and the null hypothesis (H0) is accepted.

We have $r (X_3 , Y)_{cal}$ = 0.832 and $r (X_1 , Y)_{lu}$ is 0.19. Hence /$r (X_3 , Y)$ cal/ > /$r (X_3 , Y)$ lu/. So rcal = 0.832 > r* = 0.19.

The value of the correlation calculated is therefore greater than that tabulated. Hence the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected.

On the basis of the above and with a margin of error of 5%, we can say that research hypothesis 4 (HR_4) is accepted, i.e. that there is a link between bottom-up differentiation among pupils with disabilities and the belief in self-efficacy. The direction of the correlation is positive. The correlation coefficient is $r (X_3 , Y)_{cal}$ = 0.675. This coefficient indicates that the correlation is significant because it is between 0.60 and 0.80. The coefficient of determination between the two variables shows us that the link between upward differentiation among pupils with disabilities and belief in self-efficacy is highly significant and positive. The coefficient of determination is $r (X_4 , Y))^2_{cal}$ = $(0.832)^2$ = 0.66.

DISCUSSION
1. Bottom-up identification of pupils with disabilities
Bottom-up identification is the independent variable of the first research hypothesis. When it is crossed with the dependent variable, we obtain bottom-up identification and belief in self-efficacy. From the general hypothesis, we obtained the first research hypothesis entitled: there is a link between bottom-up identification among pupils with disabilities and belief in self-efficacy. The field data was analyzed using a qualitative, descriptive and correlational approach. Respondents were asked to complete a questionnaire based on a five-point Likert scale. These were: A=totally true; B=always true (moderately true); O=undecided (difficult to place); X=totally false; Y=always false. The operationalization of this variable enabled us to exploit certain performance indicators likely to highlight the existence of a link between bottom-up identification among pupils with disabilities and the belief in self-efficacy. Bottom-up identification concerns the case of those who are least successful with those who are most successful. When the least successful pupil makes an upward identification, they aim to work harder to perform in the same way as those who are successful. In this context, the comparison is made with pupils with whom they share similar characteristics. For the bottom-up identification, the item entitled "Compared to *successful pupils with disabilities, I am the most intelligent*", 41% stressed that among those who were successful, they were the most intelligent. Also, 40.9 thought that, among this population of successful students, they were the most appreciated by teachers. This shows that the ESH have very high esteem because, in the group of those who succeed, not only do they succeed but they are above average. This shows a high belief in self-efficacy.

The null statistical hypothesis that there is no significantly positive link between bottom-up identification among pupils with disabilities and the belief in self-efficacy was rejected. This is because pupils with disabilities compare their physical appearance, academic performance, behaviour and levels of adaptation with other pupils with disabilities. By identifying with an identical target that is above their efforts, they believe in self-efficacy.

For bottom-up identification of these results, we can say that, when the comparison is made between pupils with disabilities, according to a bottom-up target, they have a high belief in self-efficacy.

2. Top-down identification and the belief in self-efficacy

Top-down identification makes it possible to establish a top-down comparison between the pupils with disabilities who are most successful in a subject and those who are least successful. For top-down identification, several questions were asked, including: "Compared to disabled pupils who do not succeed, I am afraid of getting bad marks when I see their performance drop" and "Compared to disabled pupils who do not succeed, I am afraid of being less appreciated by teachers when I see others being belittled by the teacher". For the first item, 214 pupils with disabilities responded to this item. In the population of pupils with disabilities who succeeded, more than half of the participants did not express panic about getting bad marks when the best-performing pupils fell. Instead, they feel confident in the knowledge that the failure of a previous top performer does not affect them. The failure of those who succeed does not influence the others in the same group. Still, in the successful group, the teacher's belittling of a pupil did not influence the others. For this reason, 53 participants chose the modality "all the same wrong" to express the fact that, in the successful group, the teacher's blame has no impact on the rest. This means that the ESH have a strong belief in their efforts. They are not influenced by the failure of others. Regardless of the failure of their peers, they keep their focus. The link between top-down identification and belief in self-efficacy among pupils with disabilities is positive rather than negative.

3. Bottom-up differentiation and belief in self-efficacy

Upward differentiation concerns pupils who have different characteristics from disabled pupils. From then on, they can make a bottom-up comparison, depending on the degree of their belief in their ability to succeed academically. For the bottom-up differentiation, several questions were asked and two were selected. These questions were addressed to a sample of 214 pupils with disabilities on a five-point Likert scale. The answer to the item entitled "*When I compare my performance with other successful pupils in the class, I'm the most intelligent*" *was* rejected by more than half the sample. This means that when pupils with disabilities compare their performance with other successful pupils in the class, they are not the most intelligent. From these choices of answers, we can say that in the inclusive classroom, the group of successful pupils with disabilities are not the most intelligent. Ascending differentiation enables us to see the degree of belief in the self-efficacy of pupils with disabilities compared with other successful groups. This study shows us that the most successful students in the class are not the most intelligent. As a result, ascending differentiation with the belief in self-efficacy shows us that pupils with disabilities among other successful pupils have a belief in self-efficacy.

With the different kinds of comparisons that have been made (internal comparisons with those who succeed and those who don't, external comparisons with those who succeed and those who don't), we can see that the external comparison shows a low self-efficacy belief. The internal comparison shows a belief in high self-efficacy. However, when they find themselves in another group, certain variables make them not believe in their potential.

4. Top-down differentiation and belief in self-efficacy

For top-down differentiation, for the item: "*compared to others who do not succeed, I am afraid of becoming less good when I see others who do not succeed as well as before*", 71 pupils with disabilities chose the "totally false" option and 66 chose "all the same false". By comparing the whole class with pupils who were not doing well, they were afraid of becoming less good when they saw others who were not doing as well as before. From the relationship that exists between downward differentiation and belief in self-efficacy, we can see that pupils with disabilities have a low belief in self-efficacy because, when they make a comparison with other pupils who are not succeeding, they are afraid of not succeeding. This comparison is made by both successful and unsuccessful pupils with disabilities. So if more than half the sample is afraid of becoming less successful than before, this means that they have a low belief in their abilities.

This is in line with the results of Buunk and Ybema (1997), who hypothesise that there is a unidirectional upward movement aimed at improving oneself and one's skills. The need for self-improvement, on the other hand, originates in a more specific context and involves observing the expression of this need to improve oneself in situations where the self is threatened, particularly in stressful situations (Buunk, Cohen-Schotanus, & Van Nek, 2007). In this type of situation, there is a greater tendency to compare oneself in a top-down fashion, which can be seen in this context as a strategy for self-protection and self-preservation (Wills, 1981).

It would appear that recourse to social comparison, whatever its direction, is a process largely involved in responding to the need for self-enhancement and self-improvement. Comparison with an ascending target is more likely to be associated with self-esteem improvement and progression (Huguet, Dumas, Monteil, & Genestoux 2001; Wood, 1996). Festinger (1954) postulated that individuals tend to stop comparing themselves with people who are too different. Stopping the process of social comparison could lead to a feeling of threat for the individual and could lead the individual to adopt hostile behaviour. The presence of pupils with disabilities in an inclusive class with pupils who are different from them and who are much more successful than them in a variety of areas could lead them to develop hostile and resigned behaviour. These behaviours do not help to make them effective. Rather, they are techniques that reduce their belief in self-efficacy.

The effects of these bottom-up comparisons on students with disabilities is that they develop positive emotions such as optimism, admiration and pride. Comparisons with a top-down target are often associated with emotions with a negative valence such as shame or anger (Buunk, & Ybema, 1997; Collins, 1996). Observing individuals performing a task successfully can intensify the belief in self-efficacy. On the other hand, seeing others with apparently similar skills fail can lower expectations of self-efficacy (Jaina & Tyson, 2004). Individuals evaluate their skills and abilities concerning those of others. This being said, an individual who in the past had a good result compared to his classmate who never surpassed him, will always feel very effective. But the day the latter realises that the first student has done very well, he will tend to want to surpass himself to reach the first student's level. However, people who believe they are ineffective no longer make the extra effort and resources to surpass the first student. Once they've realised that the first student is above them, they give in and realise that they can't do it.

CONCLUSION

This research aimed to address the issue of self-efficacy beliefs in pupils with disabilities with processes of social comparison of the self (bottom-up identification, top-down identification, bottom-up differentiation and top-down differentiation). The general aim was to study the link between the processes of social comparison of the self. The approach chosen for data collection was that of mixed research. The results of the survey were presented in two phases. The first phase was qualitative and focused on the 06 subjects interviewed. The data for the second phase of the survey were collected from a sample of 214 subjects using a questionnaire, essentially attitude scales. The four research hypotheses were tested using the tools of content analysis and inferential statistics, in particular correlation analysis. The results showed that all four research hypotheses were confirmed. The results of the calculated correlation tests at a threshold of $\alpha = 0.05$ were superior to the read correlation test. Consequently, the general hypothesis which states the existence of a link between social self-comparison in pupils with disabilities and the belief in self-efficacy was 100% accepted.

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