

# Training of 'Body Language and Public Speaking' and Pupil's Disruptive Behaviour

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## Abstract

The purpose of this study is to describe and analyze students' disruptive behaviour and teacher trainee's responses before and after a Body Language and to Speak in Public training module for school teachers at the end of initial training physical education teachers (*PET*). A quasi experimental research is used to find out the effect of Language and to Speak in Public training on students' disruptive behaviours. A sample of 389 students; 243 males and 146 females participated in this study along with 20 trainee teachers; 10 (6 males and 4 females) who constitute the control group while 10 (5 males and 5 females) make the experimental group. The investigators have adapted Brunelle's Disciplinary Incidents Observation System (DIOS) and used Sony model 4K Handcam cameras with builtin projector and a BoomTone DJ wireless microphone equipped with a transceiver to detect and record students' disruptive behaviours, respectively. Findings reveal that the courses directed by trainee students during work readiness internships show a high degree of disruption, since there is a rate of 1.3 and 1.01 DB per minute. The frequency of onset of disruptive behaviours (DB1 and DB2) is slightly lower in sessions facilitated by trainees who have been trained in "Body language and public speaking". Similarly, at the level of disruptive behaviours (DB3), the trainees who underwent the training realized more significant decrease in the frequency of appearance of these behaviours. Faced with these disruptive behaviours, the trainees who attended the training were slightly more interactive in their reactions during the sessions. Findings constitute a repertory index to perceive the different disruptive behaviors of students and the reactions of trainee students to these behaviors. Therefore, the results of this study are worthy in bridging the existing potential gap and strengthening the perspective the researchers have put forward.

**Keywords:** Disruptive Behaviours; Physical education; Disciplinary Incidents Observation System; Body language; Public speaking

## 1. Introduction

Changes in modern education are causing new tensions in the role of the teacher. Indeed, the teaching profession requires the development of professional skills of teachers that can only be acquired during vocational training (Perrenoud, 2001; Ria, Sève, Durand & Bertone, 2004).

Whereas, the design of vocational training programs is essentially based on solving problems related to the work of teachers (Ministry of Education, Government of Quebec, 2001).

However, the first opportunity to confront real problems related to the work of the teacher is during the Internship Preparation to Professional Life (Beckers, 2009; Beckers, 2012). In addition, many studies indicate that the majority of trainee teachers have communication difficulties with their students during physical education courses (Bangir Alpan, Özer, Koç Erdamar & Subasi, 2014; Ria, Sève, Durand & Bertone, 2004).

This reality is contradictory with what has been put forward by Provencher (1983) who states that "the teacher of the future will be the one who masters the mechanisms of communication between teacher and pupils and who will accept to be really involved in the pedagogical relation that a real communication obliges ". Similarly, Richmond (2001) proves that "For teachers, having basic communication skills is not enough." As a result, the initial training of Physical Education Teachers (PET) has to focus on communication skills. In fact, future teachers must take into account the natural use of the language and the capacity to adjust linguistically and physically to the various learning situations (Charles, 1997; Clément & Noels, 2006).

During the initial training of PET at the Higher Institute of Sport and Physical Education of Tunis, students underwent training in communication through the programming of a communication module, which consists of 3 languages: French, English, and computer science (Boizumault, 2013). Hence, the idea of developing communication of PET through training programs in Body language and public speaking is of paramount importance to remedy unwilling behaviours and promote safe communication among these parties.

For the purpose of this research, the researchers have assumed that the frequency of disturbing behaviour episodes is affected by this training since all the behaviours manifested by the classroom teacher, whether conscious or unconscious, are worthy of messages and the students are sensitive to all these signs and clues as their classroom behaviour is directly related to their perception of these messages (Moulin, 2004).

## **2. Presentation of the Reference Framework**

The perspective the researchers have put forward is drawn on the work carried out by "Jean-François Desbiens" and his collaborators (Desbiens, Lanoue, Turcotte, Tourigny & Spallanzani, 2009; Desbiens, Spallanzani, Turcotte, Roy, Lanoue & Tourigny, 2014).

Desbiens et al. (2014) set objectives for his approach which are described as follows:

- i) draw a portrait of disruptive behavior during physical education classes taught by trainees;
- ii) compare the frequency and distribution of CPs according to the gender of the trainees; and
- iii) compare the frequency and distribution of CPs according to the degree of advancement of the trainee in his training program (Internship Preparation to Professional Life at the end of initial training (terminal class).

The proposed model nevertheless remains more general than specific in its foundations wherein it is strongly oriented by the approaches to problems of indiscipline encountered during learning the trade, conflict situations (Yuan & Lin, 2012). The work on disruptive behaviour (DB) concerns situations in regular classes rather than in physical education (Hodges Kulinna, Cothran & Regualos, 2006) and the work of Brunelle et al. (1993) on DB is detected by the 'Disciplinary Incident Observation System' (DIOS).

Taking into account the above said, the purpose of this study is to contribute to the improvement of the initial training in communication of PET by proposing a complimentary training program in 'Body Language and Public Speaking' articulated in the terminal internship. Indeed, the specific objective is measuring its impact on:

- (a) the frequency of CPs occurring during courses taught by students' interns;
- (b) the types of reactions of student interns to the various disruptive behaviors of their teachers.

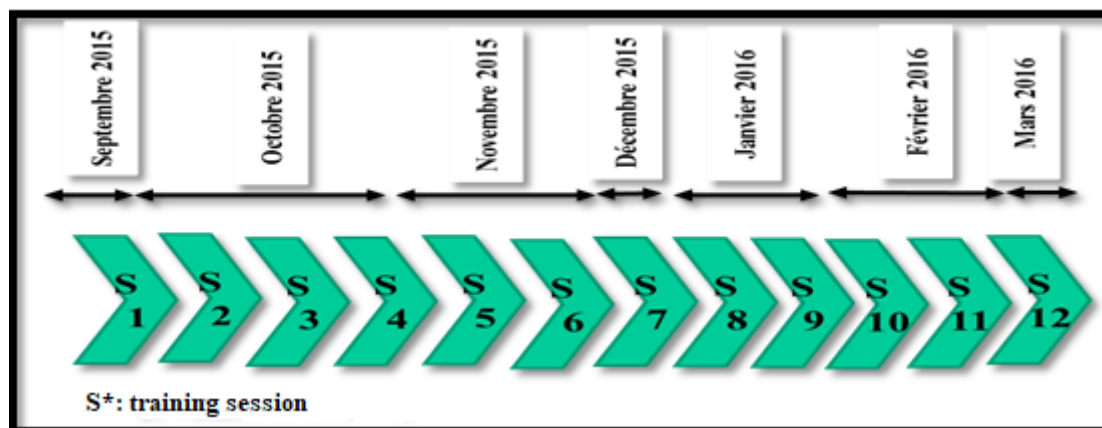
More precisely, it will first be a question of describing the repercussions of this program on the practices of the trainees of the experimental ( $Gr_{Exp}$ ) and control ( $Gr_{Tém}$ ) groups between the start and the end of the Internship Preparation to Professional Life.

### 3. Research Objective

This research aims at elaborating and experimenting a training program of 'Body Language and Public Speaking' (*BLPS*) by trainee students at the end of initial training in physical education. The specific objective of the study deals with the description of students disruptive behaviour during the sessions led by the trainee teachers as well as the reactions to these deviant behaviours of the students before and after the training (*BLPS*) in the Internship Preparation to Professional Life.

### 4. Methodology

A quasi-experimental study is used in this research paper for the fact that there is manipulation of a variable, namely the training program of Body Language and Public Speaking (*BLPS*) and its effect on disruptive behaviour in physical and sports education. The training program covers 12 meetings lasting for 2 hours, which makes 24 training hours. The training started in September and it ended in March.



**Figure 1:** The Training Program in 'Body Language and Public Speaking'.

Indeed, each meeting is associated with a thematic content that is presented, worked, discussed and experimented. A training meeting implies a theoretical range followed by its implementation. By the 'active experience', the trainees are asked to plan, organize and supervise teaching sequences then, outside meetings, they are invited to implement the elements of content into their training environment. In order to have a more positive effect between the experience and learning, areas of successes are systematically underlined while those of failure are discussed and analyzed, thus, allowing to make all the aspects of the training program constructive. In this respect, trainee teachers are invited to:

1. Work on oral expression techniques (breathing, voice, articulation, rhythm and repetition).

2. Improve nonverbal communication (territories, proximity, posture, gestures and facial expressions).
3. Improve self perception.
4. Regulate stress and control speech.

#### **4.1. Participants**

A sample of N=10 (6 males and 4 females) along with N=10 (5 males and 5 females) are used in this research in which the former represents the first reference group (the control group) while the latter covers the experimental group. They are indeed volunteers who are assigned to instruct in the third and final year of university education in PSE. They were launched in a practical training course in a thirty-week long secondary school environment, with four hours of practice for each of them with a total of 120 hours of annual practice. Each of the four-hour episodes is organized in a 50 minute lessons each time for the same groups. All participants were previously informed about the aims of the study as well as the arrangements made to preserve their anonymity and the confidentiality of the data collected.

A total of 389 (Mature:  $13.22 \pm 0.35$ ) high school students, of whom 243 (62.47%) were males and 146 (37.53%) females, participated in this study with an average of 34 students per class. They were engaged in collective sports activities (either handball or basketball) since the project of their schools only uses collective sports with a view to facilitate their social integration. In hope to interpret the encountered DBs, two coders are trained to provide the intended data which goes through sequence stages to its validity.

#### **4.2. Experimental Protocol: Didactic Observation**

The ten trainee teachers in cohort B (experimental group) will be compared to the ten other trainee teachers in cohort A (control group) during a practical training course.

The observation is made at two stages: the first collection is performed before training while the second takes place within the last week of the training. These observations happen in the exercise sites of the practical pedagogy course. The data collection covers 40 sessions of 50 minutes each, which were filmed before and after the training. It was carried out in the academic year 2015-2016.

#### **4.3. Data Collection Instrument**

In order to be able to identify and relate the behaviours of the participants selected in this study, (instructions, private or public remarks, verbal reactions of the trainee and the students), the researchers use two Sony model 4K Handcam cameras with builtin projector and a BoomTone DJ wireless microphone equipped with a transceiver (VHF 10HL F4 Micro HF) and a range of 100 meters to be able to intercept verbal interventions.

All the trainee teachers are filmed at least during a session before the recording in order to accustom the protagonists of the study to the material used. In order to reduce the Hawthorne effect among teachers (behavior modification due to the presence of an observer), the experimenter introduced himself to the teacher as being the one who conducts a survey on student motivation in EPS, without making any reference to the Pygmalion effect.

Data collection is done with the help of two camcorders and a wireless microphone. The two cameras are placed in diagonally opposite positions that cover the different angles of the whole area where the session takes place.

#### **4.4. The Observation Grid**

In order to analyze students' disruptive behaviours in physical education classes, the investigators have used Brunelle's observation framework (1993), that is to say DISCIPLINARY INCIDENTS OBSERVATION SYSTEM (DIOS). The latter is an observation system with

predetermined categories. It identifies and describes the content of disciplinary incidents that DB encounters during a physical education session. The DIOS is based on an event observation strategy, meaning that the system helps to describe the disciplinary incidents whose disruptive behaviors (DB) occur during physical education classes based on the moment of its occurrence. The observation grid shows 8 categories:

- 1) Students' DB;
- 2) Intensity level of DB;
- 3) DB's moment of occurrence;
- 4) Number of students involved;
- 5) Effects of the DB on the proceeding of the session;
- 6) Student teachers' types of reactions to DB;
- 7) Effects of the student teachers' reactions on the DB;
- 8) DB's accessibility or inaccessibility level for student teachers.

The DIOS uses an event observation strategy. For example, disciplinary incidents are coded as they occur during physical education classes. More specifically, the DIOS allows the analysis of a disciplinary incident according to several components (the moment of the lesson where the incident occurs, the number of students involved the disruptive behaviour of the students, the reactions of the teacher, the duration of the disciplinary episode, the effect of the teacher's reaction and the source of the incident). The nineteen behaviours that were chosen to report the most common deviances of students are presented in Table 1. These behaviours are grouped into three levels according to the severity of the disruptive behavior and its influence on the course of the session.

**Table 1. Students' Disruptive Behaviors.**

<b>The first level disruptive behaviors (DB<sub>1</sub>)</b>	<b>The second level disruptive behaviors (DB<sub>2</sub>)</b>	<b>The third level disruptive behaviors (DB<sub>3</sub>)</b>
Disruptive behaviors that have a weak influence on the life of the class, but which can disturb the teacher.	Disruptive behavior likely to disturb the class in the short or medium term.	Disruptive behaviors that actually disturb the good flow of the class when they occur.
<b>Behaviours</b>	<b>Behaviours</b>	<b>Behaviours</b>
<ul style="list-style-type: none"> <li>• Distracted</li> <li>• Bavarde</li> <li>• Late</li> <li>• No costume</li> <li>• Leaving the classroom</li> </ul>	<ul style="list-style-type: none"> <li>• Fooling around</li> <li>• Squabbling</li> <li>• Bulling</li> <li>• Making noise</li> <li>• Deforming the rules</li> <li>• Violates the rules voluntarily</li> <li>• Giving up practice</li> </ul>	<ul style="list-style-type: none"> <li>• Criticizing</li> <li>• Lashing out at materiel</li> <li>• Mugging</li> <li>• Dangerous behaviour</li> <li>• Being rude</li> <li>• Ridiculing</li> <li>• Resisting instructions</li> </ul>

The possible reactions that the teacher can adopt when there is an emergence of non-observances are twelve in number and are related to the three types of pedagogy (normative: behaviors of imposition, libertarian: permissive behaviors, interactive: behaviors of affirmation and openness). Table 2 reflects teachers' reactions categories.

**Table 2. Teachers' Reactions.**

Normative Imposition	Libertarian Permissive	Interactive affirmation	
		Assertion behaviour	Assertion behaviour
The reactions lead students to execute orders that are transmitted authoritatively and without the right to appeal.	Permissive reactions are characterized by behaviours in which students are virtually left to their own devices.	The teacher expresses his needs by applying sanctions as consequences to the breaches of rules known but not respected by the students.	The teacher opens up to the needs of students so that they can decide for themselves, express themselves, negotiate and take charge.
<ul style="list-style-type: none"> <li>- Dictate a behaviour</li> <li>- Reprimand</li> <li>- Designate a consequence.</li> </ul>	<ul style="list-style-type: none"> <li>- Make a reminder</li> <li>- Ignore</li> </ul>	<ul style="list-style-type: none"> <li>- Apply a consequence</li> <li>- Give a reason.</li> </ul>	<ul style="list-style-type: none"> <li>- Describes the behaviour</li> <li>- Express feelings</li> <li>- Recognize feelings</li> <li>- Attracting arrangement.</li> <li>- Encouragement</li> </ul>

**4.5. The Coding Process**

Two coders were trained in the use of DIOS for coding video recordings. The coders first worked as a team to become familiar with the observation grid and master all its components. There was a need to practice and classify DBs that occur during PET sessions. In the second place, the individual coding followed by the confrontation of the grids occur which showed some divergences. It was therefore necessary to return to the definitions of the components of the grid to ensure the compliance of the DB and agree on the same interpretation. After the training period, the coding of the two coders was subjected to the fidelity test several times before starting the final coding.

**4.6. Data Analysis**

The set of dependent variables related to time of learning have been identified by a grid of observation measuring the time of performance of the duties mentioned above. The researchers use Statistical Package of Social Science (SPSS) version 16.0. The threshold of meaning withheld is of 0.05.

**4.7. Inference Statistics**

Given the small number of observations and the non-normality of the distribution of the whole values of the variables, the investigators select the Mann-Whitney U-test of independent samples and wilcoxon signed rank test of associated samples to compare the values of the variables related to the learning time of the two groups.

**5. Results**

**5.1 Disruptive Behaviour of Students Before and After Training:**

The results in Table 3 show the frequency of onset of disruptive behaviour before and after training in both groups of trainee students.

**Table 3. Frequency of disruptive behaviour adopted by students before and after training in ten sessions led by student physical education trainees.**

Disruptive Behaviours	Before the training (T0)		After the training (T1)	
	Control group	Experimental group	Control group	Experimental group
<b>Level 1</b>	<b>298 (42.27%)</b>	<b>259 (40.72%)</b>	<b>231 (40.17%)</b>	<b>184 (41.82%)</b>
• Distracted	87 (12.34 %)	70 (11.01 %)	57 (9.91%)	57 (12.95 %)
• Bavarde	158 (22.41 %)	163 (25.63 %)	124 (21.57%)	116 (26.36 %)
• Late	34 (4.82 %)	19 (2.98 %)	21 (3.65 %)	08 (1.82 %)
• No costume	16 (2.27 %)	07 (1.1 %)	26 (4.52 %)	02 (0.45 %)
• Leaving the classroom	03 (0.43 %)	00 (00 %)	03 (0.52 %)	01 (0.23 %)
<b>Level 2</b>	<b>354 (50.21%)</b>	<b>330 (51.89%)</b>	<b>300 (52.17%)</b>	<b>219 (49.77%)</b>
• Fooling around	24 (3.4 %)	27 (4.25 %)	19 (3.3 %)	06 (1.36 %)
• Squabbling	126 (17.87 %)	109 (17.14%)	94 (16.35 %)	78 (17.73 %)
• Bulling	52 (7.37 %)	72 (11.32 %)	31 (5.39 %)	46 (10.45 %)
• Making noise	84 (11.91 %)	51 (8.02 %)	68 (11.83 %)	53 (12.05 %)
• Deforming the rules	49 (6.95 %)	43 (6.76 %)	71 (12.35 %)	24 (5.45 %)
• Violates the rules voluntarily	13 (1.84 %)	19 (2.99 %)	17 (2.95 %)	12 (2.73 %)
• Giving up practice	06 (0.85 %)	09 (1.41 %)	00 (00 %)	00 (00 %)
<b>Level 3</b>	<b>53 (7.52%)</b>	<b>47 (7.39%)</b>	<b>44 (7.65%)</b>	<b>37 (8.41%)</b>
• Criticizing	07 (0.99 %)	04 (0.63 %)	05 (0.87 %)	03 (0.68 %)
• Lashing out at materiel	08 (1.13 %)	06 (0.94 %)	09 (1.57 %)	06 (1.36 %)
• Mugging	05 (0.71 %)	07 (1.1 %)	05 (0.86 %)	08 (1.82 %)
• Dangerous behavior	12 (1.7 %)	08 (1.26 %)	07 (1.22 %)	05 (1.14 %)
• Being rude	06 (0.85 %)	06 (0.94 %)	06 (1.04 %)	04 (0.91 %)
• Ridiculing	02 (0.28 %)	00 (00 %)	03 (0.52 %)	00 (00 %)
• Resisting instructions	13 (1.84 %)	16 (2.52 %)	09 (1.57 %)	11 (2.5 %)
<b>Total</b>	<b>705</b>	<b>636</b>	<b>575</b>	<b>440</b>
	<b>1341</b>		<b>1015</b>	

Before training, the absolute frequency is expressed as a function of all the disturbing behaviours (n = 1341) with an average of 67.05 disruptive behaviour per session with 1.3 disruptive behaviour per minute. This very high number of disturbing behaviors (DB) coded prior to the start of training is divided into 705 DB occurring in the ten sessions presented by the control group, and 636 DB occurring in the ten sessions presented by the experimental group.

However, after training the absolute frequency is expressed as a function of the set of disruptive behaviours (n = 1015) with an average of 50.75 DB per session and 1.01 DB per minute. This number of DB coded after the training is divided into 575 DB occurred in the ten sessions presented by the control group, and 440 DB occurred in the ten sessions is presented by the experimental group.

For the control group, during the first two months of work experience preparation (T0), the classification of disruptive behaviours by level shows that about 50.12% of the behaviours are of second level, that is to say, they are likely to disturb the class in the short or medium term. More

specifically, the behaviours namely: " Fooling around " (24), "Make noise" (84), " Squabbling " (126), and " Bulling " (52) are the second most commonly reported in second-level deviances.

First-level of disruptive behaviours, which have a small influence on the life of the class but may still disturb the student trainee, account for approximately 42.27% of disruptive behaviours adopted by students. The main deviances of this category are "Bavarde" (158) and "Distracted" (87). As for the third-level of disruptive behaviors, which actually disturb the excellent progress of the class from the moment they occur, are much less frequent (7.52%) and are expressed mainly by deviances such as " Resisting instructions" (13), and " Dangerous behavior "(12). Finally, it is interesting to note that the disruptive behaviours "Distracted" and "Bavarde" (first level) as well as " Squabbling " and " Making noise" (second level) alone account for 64.54%.

At the end of the work experience preparation course (T1), 52.17% of the behaviours are in the second level. More specifically, the behaviours " Squabbling "(94), " Deforming the rules " (71) and " Making noise" (68), constitute the most often identified deviances.

The First-level of disruptive behaviours account for approximately 40.17% of the disruptive behaviours being performed by students. The main deviances of this category are "Bavarde" (124) and «Distracted" (57).

At the third-level of disruptive behaviour, which accounts for 7.65% of all disruptive behaviours is expressed mainly by deviances such as " Resisting instructions " (09) and " Lashing out at materiel" (09). It is interesting to note that disruptive behaviors "Bavarde " (first level) as well as " Squabbling ", " Deforming the rules " and "makes noise" (second level) alone account for 79.55% of all DBs.

Finally, it should be noted that all the disruptive behaviors (1st, 2nd and 3rd level) are reduced by 18.44% at the end of the training period. For the experimental group and before the beginning of the training (T0), the classification of disruptive behaviours by shows that about 51.89% of the behaviours are at the second level. Particularly, the "Squabbling" (109) and " Bulling " (72) are the second most frequently identified second-level deviances.

At the first-level of disruptive behaviours that account for about 40.72% of disruptive behaviors adopted by students,"Bavarde" (163) and "Distracted" (70) are the main recorded deviations. The third-level of disruptive behaviours are less frequent (7.39%) and are expressed mainly by deviances such as "Resisting instructions" (16), and "Dangerous behaviour" (08). Finally, it is significant to record that the disruptive behaviours:" Distracted" and "Bavarde" (first level) as well as "Squabbling ", "Bulling" (second level) count alone 73.11%.

After three months of training (T1), 49.77% of the behaviours are in the second level. More specifically, the behaviours "Squabbling" (78), "Making noise" (53), and "Bulling " (46), constitute the most frequent deviances. The first-level of disruptive behaviours account for approximately 41.82% of the disruptive behaviours being adopted by students. The main deviances of this category are "Bavarde" (116) and "distracted" (57).

At the third-level of deviant behaviour which represents 8.41% of all disruptive behaviours is expressed mainly by deviances such as " Resisting instructions " (11) and " Mugging" (08). "Distracted" and "Bavarde" behaviours (first level) as well as " Squabbling"," Making noise " and " Bulling " (second level) alone account 79.55%.

Finally, it should be noted that all the disruptive behaviours (1st, 2nd and 3rd level) witness a decrease of 30.82% in the control group. Hence, this decrease in the frequencies of appearance



of deviant behaviours adopted by the students during the sessions led by the trainee teachers is more important with the experimental group than the control group.

### 5.1.1. The first level disruptive behaviors (DB1)

**Table 4. Frequency of onset of type 1 disruptive behaviors (DB<sub>1</sub>) by session time before and after training in both groups (experimental and control).**

Situations		$G_{CONT} / G_{Exp}$ $T_0$	$G_{CONT} / G_{Exp}$ $T_1$	Control group ( $T_0 \rightarrow T_1$ )	Experimental group ( $T_0 \rightarrow T_1$ )
DB <sub>1</sub>	Before class	P=0.247	P=0.796	P = 1	P = 0.305
	Introduction	P= 1	P= 0.19	P = 0.003	P = 0.001
	Warming up	P= 0.631	P= 0.971	P =0.002	P =0.00
	Explanation	P= 0.353	P= 1	P = 0.000	P = 0.000
	Transition	P= 1	P= 0.19	P =0.000	P =0.000
	Educative	P= 0.063	P= 1	P =0.000	P =0.000
	Game	P= 1	P =1.229.10 <sup>-4</sup>	P =0.000	P =0.000
	Conclusion	P= 0.315	P =0.007	P =0.000	P =0.007

**NOTE:**DB<sub>1</sub>: disruptive behavior type 1; G<sub>Exp</sub>: Experimental group; G<sub>CONT</sub>: Control group; T<sub>0</sub>: Observation before the designed training (September 2015); T<sub>1</sub>: Observation after the designed training (March 2016).

Before training (T<sub>0</sub>), the frequency of onset of DB type 1 (DB<sub>1</sub>) was insignificant in the two groups. Put differently, there is no difference between the two groups in the frequency of occurrence of DB<sub>1</sub>. After three months of training (at T<sub>1</sub>), the frequency of deviant episodes was not significant between the two groups except at the 'Game' ( $p = 1.229.10^{-4}$ ) and 'conclusion' moments ( $p = 0.007$ ). In situations of 'play' and 'conclusion', the frequency of the occurring behaviours was more significant in control group than in the experimental group. At the end of the vocational training course, the variation in the frequencies of appearance in DB<sub>1</sub> decreased significantly in both groups (Control group and Experimental group). However, at the time before the course, the frequencies of appearance of the DB<sub>1</sub> remain very high for the control group ( $p = 1$ ) compared to the experimental group ( $p = 0.305$ ).

### 5.1.2. The second level disruptive behaviors (DB2)

**Table 5. Frequency of onset of Type 2 Disruptive Behaviour (DB<sub>2</sub>) by session time before and after training in both groups (experimental and control).**

Situations		$G_{CONT} / G_{Exp}$ $T_0$	$G_{CONT} / G_{Exp}$ $T_1$	Control group ( $T_0 \rightarrow T_1$ )	Experimental group ( $T_0 \rightarrow T_1$ )
DB <sub>2</sub>	Before class	P = 0.481	P = 0.796	P = 0.001	P = 0.001
	Introduction	P = 0.143	P = 0.481	P = 0.000	P = 0.000
	Warming up	P = 0.247	P = 3.2.10 <sup>-4</sup>	P =0.000	P =0.001
	Explanation	P = 0.739	P = 0.912	P = 0.000	P = 0.000
	Transition	P = 0.143	P = 0.015	P =0.001	P = 0.000
	Educative	P = 4.8.10 <sup>-8</sup>	P = 1.08.10 <sup>-5</sup>	P =0.000	P =0.000
	Game	P = 0.247	P = 0.436	P =0.000	P =0.000
	Conclusion	P = 0.353	P = 0.015	P =0.000	P =0.001

**NOTE:**DB<sub>1</sub>: disruptive behavior type 1; G<sub>Exp</sub>: Experimental group; G<sub>CONT</sub>: Control group; T<sub>0</sub>: Observation before the designed training (September 2015); T<sub>1</sub>: Observation after the designed training (March 2016).

Before training (T<sub>0</sub>), the frequency of onset of Type 2 disruptive behaviors (DB<sub>2</sub>) was insignificant between the two groups, except at the 'Educative' phase (p = 4.8.10-8). During this phase, sessions led by the G<sub>CONT</sub> scored a higher number of DB<sub>2</sub>. After three months of training (T<sub>1</sub>), the frequency of DB<sub>2</sub> remained insignificant for the following phases: 'Before the course' (p = 0.796), 'Introduction' (p = 0.481), 'Explanation' (p = 0.912) and 'Game' (p = 0.436). While during the warm up situations' (p = 3.2.10-4), 'Transition' (p = 0.015), 'Educational' (p = 1.08.10-5) and 'Conclusion' (p = 0.015); the frequency of DB<sub>2</sub> is less important in Experimental group than Control group. At the end of the work experience preparation course, the variation in DB<sub>2</sub> occurrence frequencies decreased significantly in both groups (Control group and Experimental group).

### 5.1.3. The third level disruptive behaviors (DB3)

**Table 6. Frequency of onset of Type 3 Disruptive Behavior (DB3) by session time before and after training in both groups (experimental and control).**

Situations		G <sub>CONT</sub> / G <sub>Exp</sub>	G <sub>CONT</sub> / G <sub>Exp</sub>	Control group	Experimental group
		T <sub>0</sub>	T <sub>1</sub>	(T <sub>0</sub> →T <sub>1</sub> )	(T <sub>0</sub> →T <sub>1</sub> )
DB <sub>3</sub>	Before class	P = 0.481	P = 0.143	P = 0.157	P = 0.002
	Introduction	P = 0.143	P = 0.739	P = 0.166	P = 0.002
	Warming up	P = 1	P = 0.481	P = 0.157	P = 0.058
	Explanation	P = 0.143	P = 0.481	P = 0.366	P = 0.003
	Transition	P = 0.436	P = 0.218	P = 0.01	P = 0.026
	Educative	P = 0.796	P = 0.481	P = 0.184	P = 0.032
	Game	P = 0.393	P = 0.579	P = 0.007	P = 0.001
	Conclusion	P = 0.123	P = 1	P = 0.346	P = 0.007

**NOTE:**DB<sub>1</sub>:disruptive behavior type 1; G<sub>Exp</sub>: Experimental group; G<sub>CONT</sub>: Control group; T<sub>0</sub>: Observation before the designed training (September 2015); T<sub>1</sub>: Observation after the designed training (March 2016).

Before the formation (T<sub>0</sub>), there is no difference between the two groups at the frequency of occurrence of DB<sub>3</sub>. After three months of training (T<sub>1</sub>), the frequency of DB<sub>3</sub> was not significant between the two groups. However, it is crucial to note that the variation level of the DB<sub>3</sub> frequencies show a significant decrease in the experimental group than the control group. This decrease appeared mainly in the situations of 'Before class' (p = 0.002), 'Introduction' (P = 0.002), 'Explanation' (p = 0.003), 'Transition' (p = 0.026), 'Educational' (p = 0.032), 'Game' (p = 0.001) , and 'Conclusion' (p = 0.007). As far as the control group is concerned, at the end of the training period, the DB<sub>3</sub> variation frequency was not significant for the 'before class' situations (p = 0.157), ' introduction '(p = 0.166), ' Warming up '(p = 0.157), ' Explanation '(p = 0.366), ' Educative '(p = 0.184) ,and' Conclusion '(p = 0.346).

## 5.2. Trainee teacher's reactions to the disruptive behavior of their students before and after the training

Table 7. Trainee teacher reactions to student disruptive behavior before and after the training.

REACTIONS OF TEACHERS TRAINEES	Before the training (T0)		After the training (T1)	
	Control group	Experimental group	Control group	Experimental group
	F	F	F	F
<b>NORMATIVE IMPOSITION</b>	<b>258</b> <b>(46.74 %)</b>	<b>287</b> <b>(58.45 %)</b>	<b>223</b> <b>(45.05 %)</b>	<b>210</b> <b>(51.6 %)</b>
Dictates behaviour	192 (34.78 %)	214 (43.58 %)	151 (30.51 %)	156 (38.32 %)
Reprimand	38 (6.88 %)	52 (10.59 %)	40 (8.08 %)	35 (8.59 %)
Designate a consequence	28 (5.07 %)	21 (4.28%)	32 (6.46 %)	19 (4.69 %)
<b>LIBERTARIAN PERMISSIVE</b>	<b>224</b> <b>(40.58 %)</b>	<b>161</b> <b>(32.79 %)</b>	<b>189</b> <b>(38.18 %)</b>	<b>123</b> <b>(30.22 %)</b>
Make a reminder	61 (11.05 %)	46 (9.37 %)	79 (15.96 %)	71 (17.44 %)
Ignore	163 (29.53 %)	115 (23.42 %)	110 (22.22 %)	52 (12.78 %)
<b>INTERACTIVE AFFIRMATION</b>	<b>70</b> <b>(12.68 %)</b>	<b>43</b> <b>(8.76 %)</b>	<b>83</b> <b>(16.77 %)</b>	<b>74</b> <b>(18.18 %)</b>
<i>1. Assertion behavior:</i>				
Apply a consequence	13 (2.36 %)	07 (1.43 %)	16 (3.23 %)	14 (3.44 %)
Give a reason	26 (4.71 %)	12 (2.44 %)	21 (4.24 %)	18 (4.42 %)
<i>2. Opening behaviour:</i>				
Describes the behavior	07 (1.27 %)	08 (1.63 %)	12 (2.42 %)	13 (3.19 %)
Expresses feelings	13 (2.36 %)	11 (2.24 %)	21 (4.24 %)	19 (4.67 %)
Recognize feelings	04 (0.72 %)	00 (00 %)	04 (0.81 %)	03 (0.74 %)
Attracting arrangement	05 (0.9 %)	05 (1.02 %)	03 (0.61 %)	03 (0.74 %)
<b>Encouragement</b>	02 (0.36 %)	00 (00 %)	06 (1.21 %)	04 (0.98 %)
<b>Total</b>	<b>552</b>	<b>491</b>	<b>495</b>	<b>407</b>

NOTE:DB<sub>1</sub>: disruptive behavior type 1; G<sub>EXP</sub>: Experimental group; G<sub>CONT</sub>: Control group; T<sub>0</sub>: Observation before the designed training (September 2015); T<sub>1</sub>: Observation after the designed training (March 2016).

The trainees' reactions to the disruptive behaviour of their students are shown in Table7 in which the findings reveal that trainees' in both experimental and control group reacted with 491 and 552 times respectively to disruptive behaviours displayed by their students in ten sessions before the start of the formation (T<sub>0</sub>).The nature of the trainees' reactions reveals that the

normative approach is dominant among them (experimental group and control group). Indeed, more than 50% of reactions constitute tax behaviours. The most revealing reactions of this trend for both groups are "dictates behavior" and "reprimand". In addition, the control group is regularly libertarian (40.58%) than the experimental group (32.79%). Finally, the interactive pedagogy is far from being used by the trainees of the two groups; control group (12.68%) and experimental group (8.76%) at the beginning of the Internship Preparation To Professional Life. After 3 months of training, the reactions of training teachers to students' DBs reach 495 for GCONT and 407 for GEXP during 10 sessions after the end of the training.

After the training, the normative approach dominates the nature of the reactions of the trainees of the two groups. In fact, the tax behaviours cover more than 45% in the control group and 51.6% in the experimental group reactions. The most revealing reactions for both groups remain "dictates behavior" and "reprimand". In addition, the control group is regularly libertarian with (38.18%) than the experimental group (30.22%). The Experimental group after the training was more interactive in its reactions to their students than the control group since they reach 18.18% of the reaction set while the control group reaches 16.77%.

## 6. Discussion

At the level of disruptive behaviors (DB), the data collected with the help of DIOS first showed that the courses run by trainee students during a work experience training course reveal a high degree of disruption since there is a rate of 1.3 and 1.01 DB per minute. We also find that the highest number of deviant student behaviours is in the second-level (DB2) with a percentage of 49% of all behaviours. In addition, all type 1 and 2 disruptive behaviours constitute 90% of inappropriate ones and are with little influence on the life of the class when they appear. Whereas, third-level deviances, which actually interfere with the smooth running of the class from the moment they occur, are much less frequent and constitute between 7% and 8% of students' deviant behaviour during sessions led by trainee students. These results are clearly in line with other research using "DIOS" (Hodges Kulinna , Cothran & Regualos , 2006).

For the first-level of disruptive behaviour (DB1), the frequency of onset was insignificant between the two groups during different moments at the beginning of the Internship Preparation to Professional Life. Indeed, DB1 represents approximately 42.27% for the control group and 40.17% for the experimental group. This is consistent with the study done by Stephan Dostie (1996) who states that students commit particularly high-level non-observances when they are close to the teacher during periods of explanation.

After three months of training (T1), the frequency of deviant episodes was insignificant between the two groups except at the 'Game' ( $p = 1.229.10^{-4}$ ) and 'conclusion' moments ( $p = 0.007$ ). In both situations, the frequency of occurrence of these deviant behaviors was more significant in the control group than in the experimental group. This is explained by trainees' ignorance of disruptive behaviours in certain phases of the session, which encourages their repetition and even their amplification (Brunelle et al., 1993).

However, the observed high frequency of disruptive behaviours in the classes suggests a more specific analysis of the moments when these non-observances occur. Indeed, the DB1 variation frequencies of appearances underwent a significant decrease in the two groups except at the moment 'Before the course', wherein the DB1 frequencies of appearance remain very high for the control group ( $p = 1$ ) and the experimental group ( $p = 0.305$ ). Indeed, during this moment of the session, the trainee is focused on the preparation and the organization of students, materials among others. This result converges with the research of Wahl-Alexander and Curtner-Smith (2015) who assert that the de-ranking behaviours of students are more likely to occur

during organizational periods than during explanations or practice periods. Likewise, it should be highlighted that the main deviances in this category before and after training for both groups were "Talkative" and "Distracted".

For the second-level of disruptive behaviours (DB2), the frequency of onset was not significant between the two groups which represents approximately 50.21% for the control group and 51.89% for the GEXP. Thus, the sessions led by the trainees of the control group marked a higher number of DB2 at the 'Educational' moment ( $p = 4.8.10^{-8}$ ). This is translated by Ménard (2012) who found that the attitude of students varies according to the situation, according to the more or less important importance of the rules to which teachers are attached when they teach.

After three months of training (T1), the frequency of DB2 remained insignificant at the following times: 'Before class', 'Introduction', 'Explanation' and 'Game'. Indeed, the DB2 remained very frequent during these sessions led by the two groups of trainees. This is the result of greater freedom of action and interaction among students during these moments of the session (Maddeh, Hermessi, Bennour & Souissi, 2015). Whereas, during the warm-up situations' ( $p = 3.2.10^{-4}$ ), 'Transition' ( $p = 0.015$ ), 'Educational' ( $p = 1.08.10^{-5}$ ), and 'Conclusion' ( $p = 0.015$ ), the frequency of DB2 is less important in the experimental group than in the control group. This can be explained by the fact that trainees who have been trained in "Body language and public speaking" are more interactive with students in the classroom. Hence, the student is not in a situation of spectators where the possibilities of adopting inappropriate behaviour are numerous (Whear, Thompson-Coon, Boddy, Ford, Racey & Stein, 2013).

However, the variation in the DB2 frequency appearances at the end of the Internship Preparation to Professional Life was significantly reduced in both groups. Similarly, the main deviation of this category before and after the training for both groups is "chamaille". At T0, the frequency of onset of third-level of disruptive behaviours (DB3) was insignificant between the control group and experimental group at different times of the session. Indeed, the DB3s represent approximately 7.52% for the control group and 7.39% for the experimental group.

At T1, the frequency of the DB3s was not significant between the two groups. However, at the DB3 frequency level appearances, a significant decrease is detected in the experimental group than in the control group. For the Experimental group, this decrease appeared mainly in the situations of 'Before class' ( $p = 0.002$ ), 'Introduction' ( $p = 0.002$ ), 'Explanation' ( $p = 0.003$ ), 'Transition' ( $p = 0.026$ ), 'Educational' ( $p = 0.032$ ), 'Game' ( $p = 0.001$ ), and 'Conclusion' ( $p = 0.007$ ). Whereas in the Control group, there is no significance in the situations of 'Before the course' ( $p = 0.157$ ), 'Introduction' ( $p = 0.166$ ), 'Warming up' ( $p = 0.157$ ), 'Explanation' ( $p = 0.366$ ), 'Educational' ( $p = 0.184$ ), and 'Conclusion' ( $p = 0.346$ ). These results align with the study of Cicurel (2011) who asserts that the high frequencies of DB3 is one of the clues for the teacher as these episodes are too prolonged for the attention span of his/her students and that these organizational routines are no longer effective.

Faced with the various disruptive behaviours, normative pedagogy dominates the nature of the reactions of the trainees in the two groups along the Internship Preparation to Professional Life. In the same way, trainee students are also relatively permissive, but rarely use interactive pedagogy. This propensity for normative pedagogy is relatively constant regardless of the level of the involved disruptive behaviour. This finding is explained by the rather limited repertory index of trainees' reactions to these behaviours (Amamou, Desbiens, Spallanzani, & Vanderclayen, 2017).

However, it should be noted that trainees trained in "Body language and public speaking" were slightly more interactive in their reactions to the different deviant behaviors of their students

than other trainees. In terms of finalization, the collected data with the help of the DIOS at the end of the work experience preparation period first allowed the investigators to note the high frequency of disruptive behaviours in the sessions observed. More specifically, more than 90% of these non-observances may potentially disturb the class in the short or medium term (DB1 and DB2). The third-level deviances (DB3), which actually disturb the smooth running of the class from the moment they occur, are much less frequent and constitute between 7% and 8% of non-observances shown by students.

Add to this, disruptive behaviours appear more frequently at certain times of the session. In fact, students regularly adopt inappropriate behaviours during transitions, explanations, educational and play situations (Supaporn, Dodds & Griffin, 2003). However, in the course of the sessions led by trainee students who have undergone training in "Body language and speaking in public "; the frequency of occurrence of DB1 and DB1 are slightly lower. For DBs 3, a larger decrease was detected in sessions led by trainees who attended the training than their counterpart. On the other hand, normative pedagogy dominates the nature of student trainees' reactions to the different disruptive behaviours along the Internship Preparation to Professional Life. At the same time, the trainees who attended the training were slightly more interactive in their reactions to the different deviant behaviours of their students than the other trainees.

## 5. Conclusion

From the collected data with the DIOS, it can be concluded that the courses directed by trainee students during work readiness internships show a high degree of disruption, since there is a rate of 1.3 and 1.01 DB per minute. In addition, all Type 1 and Type 2 disruptive behaviours constitute 90% of inappropriate ones with a little influence on the life of the class when they occur. Whereas, third-level deviances, which actually interfere with the smooth running of the class from the moment they occur, are much less frequent and constitute between 7% and 8% of students' deviant behaviour during sessions led by trained students. However, the frequency of onset of disruptive behaviours (DB<sub>1</sub> and DB<sub>2</sub>) is slightly lower in sessions facilitated by trainees who have been trained in "Body language and public speaking". In parallel, at the level of disruptive behaviours (DB<sub>3</sub>), the trainees who underwent the training realized more significant decrease in the frequency of appearance of these behaviours. Therefore, the trainees who attended the training were slightly more interactive in their reactions during the sessions.

The results of this study illustrate the reality of the practice of future teachers during the Internship Preparation to Professional Life. Indeed, they constitute a repertoire to perceive the different disruptive behaviours of students and the reactions of trainee students to these behaviours. In this research paper, the investigators' work can undoubtedly be used as part of the initial training of PET and in formalizing the professional skills repository.

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