

The Impact of the Training in "Body Language and Public Speaking" at the End of the Initial Training of Physical Education Teachers on the Disruptive Behavior of Students During the Work Life Preparation Traineeship.

The purpose of this article is to describe and analyze students' disruptive behavior and teacher trainee 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 Delayed video scopic analysis was conducted using the "Disciplinary Incident Observation System(SOID)" Brunelle (1993). The data collected, it can be deduced 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 behaviors (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 behaviors (DB3), the trainees who underwent the training realized a greater decrease in the frequency of appearance of these behaviors.

Keywords: Disruptive behaviors, Physical Education, students, training, Body language and public speaking.

Introduction

Changes in society 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 P et al.2001). Whereas, the design of vocational training programs is essentially based on solving problems related to the work of teachers (MEQ, 2001).

However, the first opportunity to confront real problems related to the work of the teacher is during the course of preparation for professional life (Beckers J. et al 2007). In addition, many studies indicate that the majority of trainee teachers have communication difficulties with their students during PSE courses (Ria L. (2004)).

This reality is contradictory to what has been put forward by Provencher G. (1982) 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, V. P (2001) proves that "For teachers, having basic communication skills is not enough."

As a result, the initial training of PSE teachers has to focus on communication skills. In fact, the future teacher must take into account the natural use of the language and the capacity to adjust linguistically and physically to the various learning situations.

1 While during the initial training of PSE teachers at the Higher Institute of
2 Sport and Physical Education of Tunis, the students underwent training in
3 communication through the programming of a communication module that
4 consists mainly of 3 languages: French, English and computer science. Hence
5 the idea of developing the communication competence of PSE teachers
6 through training programs in Body language and public speaking.

7 For this research, we have established whether the frequency of disturbing
8 behavior episodes is affected by this training since all the behaviors
9 manifested by the classroom teacher, whether conscious or unconscious, are
10 worthy of messages and the students are sensitive to all these signs and clues:
11 their classroom behavior is directly related to their perception of these
12 messages (Moulin JF et al 2004).

13 14 15 **Presentation of the Reference Framework**

16
17 It is in this perspective that we drew on the work carried out by
18 Jean-François Desbiens, S. Lanoue, Carlo Spallanzani, J.-S. Tourigny, Sylvain
19 Turcotte, Martin Roy and Jean-Pierre Brunelle (2008). Desbiens (2008) set
20 objectives for his approach: 1) draw a portrait of disruptive behavior during
21 physical education classes taught by trainees; 2) compare the frequency and
22 distribution of CPs according to the gender of the trainees; 3) compare the
23 frequency and distribution of CPs according to the degree of advancement of
24 the trainee in his training program (training course in preparation for
25 professional life at the end of initial training (terminal class).

26 The proposed model nevertheless remains more general than specific in
27 its foundations strongly oriented by the approaches to problems of indiscipline
28 encountered during learning the trade (Fortier and Desrosiers, 1991; Flavier,
29 2002), conflict situations (Flavier, 2002), the work on disruptive behavior (CP)
30 concerns situations in regular classes rather than in physical education (Hodges
31 Kulinna, Cuthran & Regualos, 2006) and the work of Brunelle (1993) on
32 disruptive behavior (CP) detect by the disciplinary incident observation system
33 (SOID).

34 The purpose of this study is to contribute to the improvement of the initial
35 training in communication of Tunisian PSE teachers by proposing a
36 complementary training program in 'Body Language and Public Speaking'
37 articulated in the terminal internship and by measuring its impact on: (1) the
38 frequency of CPs occurring during courses taught by student interns; (2) the
39 types of reactions of student interns to the various disruptive behaviors of their
40 students. More precisely, it will first be a question of describing the
41 repercussions of this program on the practices of the trainees of the
42 experimental (GrExp) and control (GrTém) groups between the start and the
43 end of the work life preparation course.

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We believe that initial teacher training needs to be further emphasized on the dimensions of classroom teacher interactions (or in the field). Therefore, our main objective is to study the contributions of a training module in "Body Language" and to speak in public about the appropriation of the communication skills of trainees in EPS training during vocational training. . This internship is the first opportunity to confront real problems of learning and teaching (DESBIENS J.-F et al 2014).

More specifically, our work consists in analyzing the variation of pupils 'disruptive behaviors and trainees' reactions to these behaviors during the internship of professional life.

Research Objective

This research aims at elaborating and experimenting a training program of 'Body Language and Public Speaking ' by trainee students at the end of initial training in physical education. The specific objective of the study was deals with the description of students disruptive behavior during the sessions led by the trainee teachers as well as about these reactions to these deviant behaviors of the students before and after the training (BLPP) in the preparation internship working life.

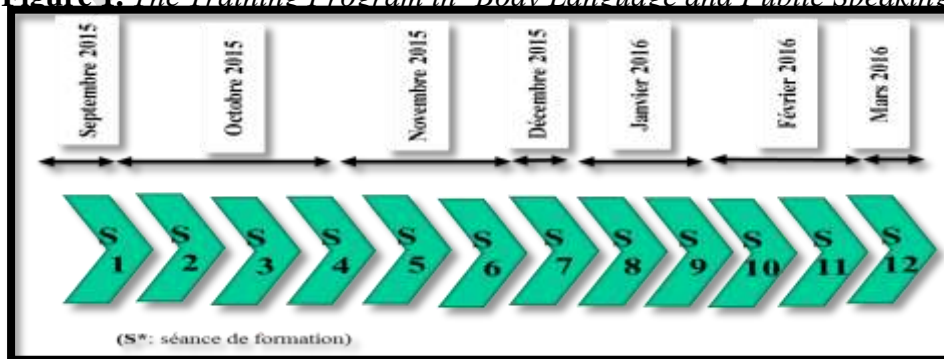
Methodology

This research consists in a quasi-experimental study for the fact that there is manipulation of a variable, namely the training program of « Body Language and Public Speaking » and that there is an observation of its effect on disruptive behavior in physical and sports education.

The Training Program in 'Body Language and Public Speaking'

The training program predicted 12 meetings lasting 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'*



1 Indeed, each meeting is associated to a thematic content which was
 2 presented, worked, dis-cussed and experimented. A training meeting implies a
 3 theoretical content followed by its implementation. By the 'active experience',
 4 the trainees are asked to plan, organize and supervise teaching sequences then,
 5 outside meetings, they were invited to implement the elements of content in
 6 their training environment. In order to have a more positive effect between the
 7 experience and the learnings, successes were systematically underlined while
 8 failures were discussed and analyzed, thus allowing to make all the aspects of
 9 the training program constructive.

10 Trainee teachers are invited to:

- 11
- 12 **1.** Work on oral expression techniques (breathing, voice, articulation, rhythm
 13 and repetition).
- 14 **2.** Improve nonverbal communication (territories, proximity, posture, gestures,
 15 facial and facial expressions).
- 16 **3.** Improve the perception of self.
- 17 **4.** Tame, regulate stress and control the speech.
- 18

19 **Note:** The former is a University professor at Higher Institute of Dramatic
 20 Arts in Tunis (I.S.A.D), communications specialist and expert in 'Body
 21 language and speaking in public.

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23 **The Participants**

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25 The sample formed by student volunteers consists of a first reference
 26 group (A) n = 10 (6 men, 4 women) and the second experimental group (B) n =
 27 10 (5 men, 5 women).

28 All volunteers were in the third and final year of university education in
 29 PSE. They were launched in a practical training course in a thirty-week long
 30 secondary school environment, with four hours of practice for each of them, for
 31 a total of 120 hours of annual practice.

32 Each of the four hour episodes was a block of four 50 minute lessons each
 33 time around the same groups. All participants were previously informed about
 34 the aims of the study as well as the arrangements made to preserve their
 35 anonymity and the confidentiality of the data collected.

36 A total of 389 (Mature: 13.22 ± 0.35) high school students, of whom 243
 37 (62.47%) were male and 146 (37.53%) female, participated in this study with
 38 an average of 34 students per class.

39 They were engaged in collective sports activities (either handball or
 40 basketball) since the project of their schools only uses collective sports with a
 41 view to facilitating their social integration.

42

43 **Experimental Protocol: Didactic Observation**

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

1 The observation was made at two moments: the first collection before
2 training, the second within a week of the end of the training. These
3 observations took place in the exercise sites of the practical pedagogy course.
4 The data collection will cover 40 sessions of 50 minutes each, which were
5 filmed before and after the training. It was done at two points during the
6 2015-2016 school year: the first collection at the beginning of the internship
7 (September: before the beginning of the training) and the second at the end of
8 the internship (March: after the end of the training).

10 **The Instrument of Data Collection**

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12 The device uses the sound / image coupling in order to be able to relate the
13 behaviors of the different actors and tell them of each one (instructions, private
14 or public remarks, verbal reactions of the trainee and the students). We used
15 two Sony model 4K Handcam cameras with built-in projector and a BoomTone
16 DJ wireless microphone equipped with a transceiver (VHF 10HL F4 Micro HF)
17 and a range of 100 meters to be able to intercept verbal interventions of the
18 student's teacher.

19 All the trainee teachers were filmed at least during a session before the
20 recording of the data, in order to accustom the protagonists of the study to the
21 material used. In order to reduce the Hawthorne effect bias (eg, Adair et al.,
22 1989) among teachers (behavior modification due to the presence of an
23 observer), the experimenter introduced himself to the teacher as being a student
24 conducting a survey on student motivation in EPS, without making any
25 reference to the Pygmalion effect.

26 Data collection is done with the help of two camcorders and a wireless
27 microphone. The two cameras are placed in diagonally opposite positions that
28 cover the different angles of the whole area where the session takes place. The
29 data collection will cover 40 sessions of 50 minutes each, which were filmed
30 before and after the training.

32 **The Grid of Observation**

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34 In order to analyze students' disruptive behaviors in physical education
35 classes, we have used the works of Brunelle et al. (1993), the authors of the
36 "Disciplinary Incidents Analysis System (SOID)". This system helps describe
37 the disciplinary incidents whose disruptive behaviors (DB) occur during
38 physical education classes based on the moment of occurrence. The
39 observation grid shows 8 categories: 1) Students' DB; 2) intensity level of DB;
40 3) DB's moment of occurrence; 4) number of students involved; 5) effects of
41 the DB on the proceeding of the session; 6) student teachers' types of reactions
42 to DB; 7) effects of the student teachers' reactions on the DB; 8) DB's
43 accessibility or inaccessibility level for student teachers

44 To analyze the disruptive behavior of students in physical education
45 sessions, we used the version of SOID (BRUNELLE, J.(1993)). The
46 Disciplinary Incident Observation System (SOID) is an observation system
47 with predetermined categories. It identifies and describes the content of

1 disciplinary incidents that DB encounter during a physical education session.
 2 The SOID is based on an event observation strategy, that is to say that
 3 disciplinary incidents are noted according to their appearance during a session.

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

15 **Table 1.** Disruptive behaviors of students
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| The first level disruptive behaviors (DB ₁) | The second level disruptive behaviors (DB ₂) | The third level disruptive behaviors (DB ₃) |
|--|--|---|
| 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. |
| Behaviours | Behaviours | Behaviours |
| <ul style="list-style-type: none"> • Distracted • Bavarde • Late • No costume • Leaving the classroom | <ul style="list-style-type: none"> • Fooling around • Squabbling • Bulling • Making noise • Déforming the rules • Violates the rules voluntarily • Giving up practice | <ul style="list-style-type: none"> • Criticizing • Lashing out at matériel • Mugging • Dangerous behavior • Being rude • Ridiculing • Résisting instructions |

17
 18 The possible reactions that the teacher can adopt when there is an
 19 emergence of nonobservances are twelve in number and are related to the three
 20 types of pedagogy (normative: behaviors of imposition, libertarian: permissive
 21 behaviors, interactive: behaviors of affirmation and openness). Categories of
 22 teacher reactions are presented in **Table 2**.

23 **Table 2:** The reactions of trainees.
 24

| Normative imposition | Libertarian Permissive | Interactive affirmation | |
|--|--|---|--|
| | | <i>Assertion behavior</i> | <i>Assertion behavior</i> |
| The reactions lead students to execute orders that are transmitted authoritatively and without the right to appeal. | Permissive reactions are characterized by behaviors 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. |

| | | | | | | |
|--------------------------|---|-----------------|---|---------------------|---|----------------------------|
| - Dictate behavior | a | - Make reminder | a | - Apply consequence | a | - Describes the behavior |
| - Reprimand | | - Ignore | | - Give a reason. | | - Express feelings |
| - Designate consequence. | a | | | | | - Recognize feelings |
| | | | | | | - Attracting arrangement . |
| | | | | | | - Encouragement |

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The Coding. Two coders were trained in the use of SOID 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 classifying DB that occur during physical education teaching sessions. In the second place, comes the individual coding followed by the confrontation of the grids which showed some divergences. It was therefore necessary at times to return to the definitions of the components of the grid to ensure the compliance of the DB and agree on the same interpretation.

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After the training period, the coding of the two coders was subjected to the fidelity test several times before starting the final coding.

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Statistical Procedures

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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.

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We used a software of statistical “Statistical Package of Social Science” SPSS 16.0. The threshold of meaning withheld is of 0.05.

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Inference Statistics

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Given the small number of observations and the non-normality of the distribution of the whole of the values of the variables, we chose 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 two groups of trainee teachers.

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Results

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Disruptive behavior of students before and after training

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

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

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Before training, the absolute frequency is expressed as a function of all

| Disruptive Behaviors | Before the training (T0) | | After the training (T1) | |
|----------------------------------|-----------------------------|----------------------|----------------------------|----------------------|
| | Control group | Experimental group | Control group | Experimental group |
| Level 1 | 298 (42.27%) | 259 (40.72%) | 231 (40.17%) | 184 (41.82%) |
| • 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 %) |
| Level 2 | 354 (50.21%) | 330 (51.89%) | 300 (52.17%) | 219 (49.77%) |
| • 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 %) |
| • Déforming 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 %) |
| Level 3 | 53 (7.52%) | 47 (7.39%) | 44 (7.65%) | 37 (8.41%) |
| • Criticizing | 07 (0.99 %) | 04 (0.63 %) | 05 (0.87 %) | 03 (0.68 %) |
| • Lashing out at matériel | 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 %) |
| • Résisting instructions | 13 (1.84 %) | 16 (2.52 %) | 09 (1.57 %) | 11 (2.5 %) |
| Total | 705 | 636 | 575 | 440 |
| | 1341 | | 1015 | |

3 the disturbing behaviors (n = 1341) with an average of 67.05 disruptive
4 behavior per session and 1.3 disruptive behavior per minute. This very high
5 number of disturbing behaviors (DB) coded prior to the start of training was
6 divided into 705 DB occurring in the ten sessions presented by the control
7 group and 636 DB occurring in the ten sessions presented by the experimental
8 group.

9 **After training**, the absolute frequency is expressed as a function of the set
10 of disruptive behaviors (n = 1015) with an average of 50.75 DB per session and
11 1.01 DB per minute. This number of DB coded after the training, divided into
12 575 DB occurred in the ten sessions presented by the control group and
13 440 DB occurred in the ten sessions presented by the experimental group.

1 For **the control group**; during the first two months of work experience
2 preparation (T0); the classification of disruptive behaviors by level shows that
3 about 50.12% of the behaviors are of second level, that is to say that they are
4 likely to disturb the class in the short or medium term. More specifically, the
5 behaviors " Fooling around " (24), "Make noise" (84), " Squabbling " (126), and
6 " Bulling " (52) are the second-most commonly reported second-level deviances.

7 First-level disruptive behaviors, which have a small influence on the life of
8 the class but may still disturb the student trainee, account for approximately
9 42.27% of disruptive behaviors adopted by students. The main deviances of this
10 category are "Bavarde" (158) and " Distracted" (87). Third-level disruptive
11 behaviors, which actually disturb the good progress of the class from the
12 moment they occur, are much less frequent (7.52%) and are expressed mainly by
13 deviances such as " Résisting instructions" (13)," Dangerous behavior "(12).

14 Finally, it is interesting to note that the disruptive behaviors "Distracted"
15 and " Bavarde " (first level) as well as " Squabbling " and " Making noise"
16 (second level) alone account for 64.54%.

17 At the end of the work experience preparation course (T1) ; 52.17% of the
18 behaviors are second level. More specifically, the behaviors " Squabbling " (94),
19 " Déforming the rules " (71) and " Making noise" (68), constitute the most often
20 identified deviances.

21 First-level disruptive behaviors account for approximately 40.17% of the
22 per-turbor behaviors adopted by students. The main deviances of this category
23 are "Bavarde" (124) and " Distracted" (57).

24 At the level of third-level disruptive behavior, which accounts for 7.65% of
25 all disruptive behaviors and is expressed mainly by deviances such as " Résisting
26 instructions " (09), " Lashing out at matériel" (09). It is interesting to note that
27 disruptive behaviors " Bavarde " (first level) as well as " Squabbling ", "
28 Déforming the rules " and "makes noise" (second level) alone account for
29 79.55% of all behaviors disruptors.

30 Finally, it should be noted that all the disruptive behaviors (1st, 2nd and
31 3rd level) were reduced by 18.44% at the end of the work experience training
32 period.

33 For **the experimental group** ; before the beginning of the training (T0);
34 the classification of disruptive behaviors by level shows that about 51.89% of
35 the behaviors are second level. More specifically, the " Squabbling" (109) and "
36 Bulling " (72) are the second most frequently identified second-level
37 deviances.

38 At the level of first-level disruptive behaviors that account for about 40.72%
39 of disruptive behaviors adopted by students. The main deviations of this
40 category are "Bavarde" (163) and " Distracted" (70).

41 Finally, third-level disruptive behaviors are less frequent (7.39%) and are
42 expressed mainly by deviances such as " Résisting instructions " (16), "
43 Dangerous behavior" (08). Finally, it is interesting to note that the disruptive
44 behaviors " Distracted" and "Bavarde" (first level) as well as " Squabbling ", "
45 Bulling" (second level) count alone for 73.11%.

1 After three months of training (T1), 49.77% of the behaviors are second
2 level. More specifically, the behaviors «Squabbling» (78), «Making noise" (53)
3 and «Bulling " (46), constitute the most frequent deviances.

4 First-level disruptive behaviors account for approximately 41.82% of the
5 disruptive behaviors adopted by students. The main deviances of this category
6 are "Bavarde" (116) and "distracted" (57).

7 At the level of third-level deviant behavior which represents 8.41% of all
8 disruptive behaviors and is expressed mainly by deviances such as " Résisting
9 instructions " (11), " Mugging" (08).

10 We also find that the disruptive behaviors "distracted" and "Bavarde" (first
11 level) as well as " Squabbling", " Making noise " and " Bulling " (second level)
12 alone account for 79.55%.

13 Finally, it should be noted that all the disruptive behaviors (1st, 2nd and
14 3rd level) suffered a decrease of 30.82% in the control group. Hence, this
15 decrease in the frequencies of appearance of deviant behaviors adopted by the
16 students during the sessions led by the trainee teachers is more important at the
17 experimental group than the control group.

18 **The First Level Disruptive Behaviors (DB₁):**

19 **Table 4.** *Frequency of onset of type 1 disruptive behaviors (DB₁) by session*
20 *time before and after training in both groups (experimental and control)*
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| Situations | | G _{CONT} / G _{Exp} | G _{CONT} / G _{Exp} | Control group | Experimental group |
|-----------------|--------------|--------------------------------------|--------------------------------------|------------------------------------|------------------------------------|
| | | T ₀ | T ₁ | (T ₀ → T ₁) | (T ₀ → T ₁) |
| DB ₁ | 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 ⁻⁴ | P =0.000 | P =0.000 |
| Conclusion | P= 0.315 | P =0.007 | P =0.000 | P =0.007 | |

23 Before training (T0), the frequency of onset of Type 1 disruptive behaviors
24 (DB₁) was insignificant between the two groups. This means that there is no
25 difference between the two groups in the frequency of occurrence of DB₁.

26 After three months of training (at T1), the frequency of deviant episodes
27 was nonsignificant between the two groups except at the 'Game' (p =
28 1.229.10⁻⁴) and 'conclusion' moments (p = 0.007). In situations of 'play' and
29 'conclusion', the frequency of occurrence of these behaviors was greater in
30 Control group than Experimental group.
31

32 At the end of the vocational training course, the variation in the
33 frequencies of DB₁ appearances decreased significantly in both groups
34 (Control group and Experimental group). However, at the time before the

1 course the frequencies of appearance of the **DB₁** remain very high for the
2 Control group ($p = 1$) and the Experimental group ($p = 0.305$).

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4 **The Second Level Disruptive Behaviors (DB₂)**

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6 **Table 5.** *Frequency of onset of Type 2 Disruptive Behavior (DB₂) by session*
7 *time before and after training in both groups (experimental and control)*

| Situations | | G_{CONT}/G_{Exp} | G_{CONT}/G_{Exp} | Control | Experimental |
|-----------------------|--------------|--------------------------|---------------------------|------------------------------------|------------------------------------|
| | | T_0 | T_1 | group ($T_0 \rightarrow T_1$) | group ($T_0 \rightarrow T_1$) |
| DB₂ | 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 ⁻⁴ | 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 ⁻⁸ | P = 1.08.10 ⁻⁵ | 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 |

8

9 Before training (T_0), the frequency of onset of Type 2 disruptive behaviors
10 (**DB₂**) was insignificant between the two groups, except at the 'Educative'
11 phase ($p = 4.8.10^{-8}$). During this phase, sessions led by the GCONT scored a
12 higher number of **DB₂**.

13 After three months of training (T_1), the frequency of **DB₂** remained
14 insignificant for the following phases: 'Before the course' ($p = 0.796$),
15 'Introduction' ($p = 0.481$), 'Explanation' ($p = 0.912$) and 'Game' ($p = 0.436$).
16 While during the warm up situations' ($p = 3.2.10^{-4}$), 'Transition' ($p = 0.015$),
17 'Educational' ($p = 1.08.10^{-5}$) and 'Conclusion' ($p = 0.015$); the frequency of
18 **DB₂** is less important in Experimental group than Control group.

19 At the end of the work experience preparation course, the variation in **DB₂**
20 occurrence frequencies decreased significantly in both groups (Control group
21 and Experimental group).

22

23 **The Third Level Disruptive Behaviors (DB₃)**

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25 **Table 6.** *Frequency of onset of type 3 disruptive behaviors (DB₃) by session*
26 *time before and after training in both groups (experimental and control)*

| Situations | | G_{CONT}/G_{Exp} | G_{CONT}/G_{Exp} | Control | Experimental |
|-----------------------|--------------|--------------------|--------------------|------------------------------------|------------------------------------|
| | | T_0 | T_1 | group ($T_0 \rightarrow T_1$) | group ($T_0 \rightarrow T_1$) |
| DB₃ | 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 |

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2 Before the formation (T0), there is no difference between the two groups
3 at the frequency of occurrence of **DB₃**.

4 After three months of training (T1), the frequency of **DB₃** was
5 nonsignificant between the two groups (Control group than Experimental
6 group). However, it should be noted that at the level of the variation of the
7 frequencies of appearances of the **DB₃**, one detects a significant decrease and
8 more important in the Experimental group than the Control group. This
9 decrease appeared mainly in the situations of 'Before class' (p = 0.002),
10 'Introduction' (P = 0.002), 'Explanation' (p = 0.003), 'Transition' (p = 0.026),
11 'Educational' (p = 0.032), 'Game' (p = 0.001) and 'Conclusion' (p = 0.007).

12 For the Control group, at the end of the work-experience training period,
13 the variation in the frequency of **DB₃** was not significant for the 'before class'
14 situations (p = 0.157), 'introduction' (p = 0.166), 'Warming up' (p = 0.157),
15 'Explanation' (p = 0.366), 'Educative' (p = 0.184) and 'Conclusion' (p = 0.346).

16

17 **Trainee Teachers' Reactions to the Disruptive Behavior of their Students** 18 **before and After the Training**

19

20 **Table 7.** Trainee teacher reactions to student disruptive behavior (DB) before
21 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 |
| NORMATIVE IMPOSITION | 258 (46.74 %) | 287 (58.45 %) | 223 (45.05 %) | 210 (51.6 %) |
| Dictates behavior | 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 consequence ^a | 28 (5.07 %) | 21 (4.28%) | 32 (6.46 %) | 19 (4.69 %) |
| LIBERTARIAN PERMISSIVE | 224 (40.58 %) | 161 (32.79 %) | 189 (38.18 %) | 123 (30.22 %) |
| 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 %) |
| INTERACTIVE AFFIRMATION | 70 (12.68 %) | 43 (8.76 %) | 83 (16.77 %) | 74 (18.18 %) |

| | | | | |
|--------------------------------------|----------------|----------------|----------------|----------------|
| <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 behavior:</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 %) |
| Encouragement | 02 (0.36 %) | 00 (00 %) | 06 (1.21 %) | 04 (0.98 %) |
| Total | 552 | 491 | 495 | 407 |

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The trainees' reactions to the disruptive behavior of their students are shown in Table 7 and show that trainees' Experimental group and Control group reacted 491 and 552 times respectively to disruptive behaviors displayed by their students in ten sessions before the start of the formation (T₀).

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 his reactions constitute tax behaviors. 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, it should be noted that 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 training course for professional life. Après trois mois de formation, les réactions des enseignants stagiaires aux comportements perturbateurs de ses élèves atteignent 495 pour Control group et 407 pour le G_{EXP} lors de dix séances après la fin de la formation (T₁).

After the training, the normative approach dominates the nature of the reactions of the trainees of the two groups (Experimental group and Control group). In fact, the tax behaviors cover more than 45% of Control group and 51.6% of Experimental group reactions. The most revealing reactions for both groups remain "dictates behavior" and "reprimand". In addition, the Control group is regularly libertarian (38.18%) than the Experimental group (30.22%). Finally, it should be noted that the Experimental group after the training was more interactive in its reactions to their students than the Control

1 group since they reach 18.18% of the reaction set, while the Control group
2 reaches 16.77%.

5 Discussion

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

19 For first-level disruptive behavior (DB1), the frequency of onset was
20 insignificant between the two groups (Control and Experimental group) during
21 the different moments of the session, at the beginning of the training course for
22 professional life. . Indeed, DB1 represents approximately 42.27% for the
23 Control group and 40.17% for the Experimental group. This is consistent with
24 the study by 'Stephan Dostie' (1996) who states that students commit
25 particularly high level nonobservances when they are close to the teacher
26 during periods of explanation.

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

34 However, the high frequency of disruptive behaviors in the classes
35 observed suggests a more specific analysis of the moments when these
36 nonobservances occur. Indeed, the variation of the frequencies of appearances
37 of DB1 underwent a significant decrease in the two groups (Control group and
38 Experimental group) except at the moment 'Before the course' the frequencies
39 of appearance of the DB1 remains very high for the Control group ($p = 1$) and
40 the Experimental group ($p = 0.305$). Indeed, during this moment of the session,
41 the trainee is focused on the preparation and organization of the students,
42 materials ... This result converges with the research of 'Siedentop D.' (1994)
43 which asserts that the de-ranking behaviors of students are more likely to occur
44 during organizational periods than during explanations or practice periods. De
45 même, il faut signaler que les principales déviations de cette catégorie avant et
46 après la formation pour les deux groupes étaient "Bavarde" et "Est distrait".

1 For second-level disruptive behaviors (DB2), the frequency of onset was
2 nonsignificant between the two groups and represented approximately 50.21%
3 for the Control group and 51.89% for the GEXP. Thus, the sessions led by the
4 trainees of the Control group marked a higher number of DB2 at the
5 'Educational' moment ($p = 4.8.10^{-8}$). This is translated by Méard, J. & Bertone,
6 S. (1998) who found that the attitude of students varies according to the
7 situation, according to the more or less important importance of the rules to
8 which teachers are attached when they teach.

9 After three months of training (T1), the frequency of DB2 remained
10 insignificant at the following times: 'Before class', 'Introduction', 'Explanation'
11 and 'Game'. Indeed, the DB2 remained very frequent during these sessions led
12 by the two groups of trainees. This is the result of greater freedom of action
13 and interaction between students during these moments of the session 'Stéphan
14 Dostie' (1996). While during the warm-up situations' ($p = 3.2.10^{-4}$), 'Transition'
15 ($p = 0.015$), 'Educational' ($p = 1.08.10^{-5}$) and 'Conclusion' ($p = 0.015$); the
16 frequency of DB2 are less important in Experimental group than the Control
17 group. This can be explained by the fact that trainees who have been trained in
18 "Body language and public speaking" are more interactive with students in the
19 classroom. Hence, the pupil is not in a situation of spectators where the
20 possibilities of adopting inappropriate behavior are numerous (Brunelle et al,
21 1993).

22 However, the variation in the frequency of DB2 appearances at the end of
23 the work-life preparation stage, was significantly reduced in both groups
24 (Control group and Experimental group).

25 Similarly, it should be noted that the main deviations of this category
26 before and after the training for both groups were s "chamaille".

27 At T0, the frequency of onset of third-level disruptive behaviors (DB3)
28 was insignificant between the two groups (Control group and Experimental
29 group) at different times of the session. Indeed, the DB3s represent
30 approximately 7.52% for the Control group and 7.39% for the Experimental
31 group of the set of behaviors.

32 At T1, the frequency of the DB3s was nonsignificant between the two
33 groups (Control group than the Experimental group). However, it should be
34 noted that at the level of the variation of the frequencies of appearances of the
35 DB3, a significant decrease is detected and more important in the Experimental
36 group than the Control group. For the Experimental group, this decrease
37 appeared mainly in the situations of 'Before class' ($p = 0.002$), 'Introduction' (P
38 $= 0.002$), 'Explanation' ($p = 0.003$), 'Transition' ($p = 0.026$), 'Educational' ($p =$
39 0.032), 'Game' ($p = 0.001$) and 'Conclusion' ($p = 0.007$). Whereas at the level of
40 the sessions led by the Control group, the variation of the frequency of the DB3
41 were not significant in the situations of 'Before the course' ($p = 0.157$),
42 'Introduction' ($p = 0.166$), 'Warming up' ($p = 0.157$), 'Explanation' ($p = 0.366$),
43 'Educational' ($p = 0.184$) and 'Conclusion' ($p = 0.346$). These results converge
44 towards the study of 'Stephan Dostie' (1996) who asserts that the high
45 frequencies of DB3 is one of the clues for the teacher that these episodes are
46 too long for the attention span of his students and that these organizational
47 routines are no longer effective.

1 Faced with the various disruptive behaviors, normative pedagogy
2 dominates the nature of the reactions of the trainees of the two groups
3 (Experimental group and Control group) along the stage of preparation to the
4 professional life. In the same way, trainee students are also quite permissive
5 but rarely use interactive pedagogy. This propensity for normative pedagogy is
6 relatively constant regardless of the level of disruptive behavior involved. This
7 finding is explained by the rather limited repertoires of trainees' reactions to
8 these behaviors (Hodges Kulinna, P. (2006)).

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

12 In terms of finalization, the data collected with the help of the SOID at the
13 end of the work experience preparation period first allowed us to note the high
14 frequency of disruptive behaviors in the sessions observed. More specifically,
15 more than 90% of these non-observances may potentially disturb the class in
16 the short or medium term (DB1 and DB2). For third-level deviances (DB3),
17 which actually disturb the smooth running of the class from the moment they
18 occur, are much less frequent and constitute between 7% and 8% of
19 nonobservances shown by students.

20 In addition, disruptive behaviors appear more frequently at certain times of
21 the session. In fact, students regularly adopt inappropriate behaviors during
22 transitions, explanations, educational and play situations. However, in the
23 course of the sessions led by trainee students who have undergone the training
24 of "Body language and speaking in public "; the frequency of occurrence of
25 DB1 and DB1 are slightly lower. For DB3s, a larger decrease was detected in
26 sessions led by trainees who attended the training than their counterpart.

27 On the other hand, normative pedagogy dominates the nature of student
28 trainees' reactions to the different disruptive behaviors along the vocational
29 preparation stage. While, the trainees who attended the training were slightly
30 more interactive in their reactions to the different deviant behaviors of their
31 students than the other trainees.

32 33 34 **Conclusion**

35
36 The data collected with the help of the SOID, it can be deduced that the
37 courses directed by trainee students during work-readiness internships show a
38 high degree of disruption, since there is a rate of 1.3 and 1.01 DB per minute.
39 In addition, all Type 1 and Type 2 disruptive behaviors constitute 90% of
40 inappropriate behaviors and are behaviors with little influence on the life of the
41 class when they occur. Whereas, third-level deviances, which actually interfere
42 with the smooth running of the class from the moment they occur, are much
43 less frequent and constitute between 7% and 8% of students' deviant behavior
44 during sessions led by trainee students.

45 However, the frequency of onset of disruptive behaviors (DB₁ and DB₂)
46 is slightly lower in sessions facilitated by trainees who have been trained in
47 "Body language and public speaking". Similarly, at the level of disruptive

1 behaviors (DB₃), the trainees who underwent the training realized a greater
 2 decrease in the frequency of appearance of these behaviors.
 3 Faced with these disruptive behaviors, the trainees who attended the training
 4 were slightly more interactive in their reactions during the sessions.

6 **The impact that this study could have on the initial training of physical** 7 **education teachers**

9 The results of our studies illustrate the reality of the practice of future
 10 teachers during the preparatory course for professional life. Indeed, they
 11 constitute a repertoire to perceive the different disruptive behaviors of students
 12 and the reactions of trainee students to these behaviors.

13 By way of this presentation, our doctoral work can certainly be used as
 14 part of the initial training of PSE teachers and in formalizing the professional
 15 skills repository for teachers of Tunisian PSE.

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