

Self-efficacy of physical education student interns in to engage their pupil's after training in "Body language and public speaking".

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Aymen Hawani

University of Manouba. Higher Institute of Sport and Physical Education (Ksar Saïd). TUNISIA. hawani.aymen@yahoo.com

<https://orcid.org/0000-0003-0692-3976?lang=fr>

Maher Mrayah University of Manouba. Research unit ECOTIDI (UR16ES10). Virtual University. TUNISIA. mrayeh.meher@gmail.com

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Abstract. This research aims to develop and test a training device in 'Body language and public speaking' centered on the development and consolidation of communication skills in future teachers of physical education in Tunisia. The effectiveness of the device was evaluated based on the evolution of the feeling of self-efficacy of the student interns to keep their pupil's engaged in learning situations before and after a specific training of "Body language and public speaking" throughout the work-life preparation course. To make this study a reality, we involved two groups of student interns. A first group to assume the role of witness received ordinary initial training provided by the 'Higher Institute of Sport and Physical Education (Ksar Saïd)'. A second group to assume the experimental role received the same initial training but was also involved in the training device designed for this study. The change in the feeling of self-efficacy was measured using the French version of the Ohio State Teacher Efficacy Scale (OSTES) questionnaire recognized in the literature (Ménard, L., Legault, F. & Dion, J-S., 2012) as an instrument measuring the effectiveness of the teacher with regard to student engagement as the main indicator of classroom management. The results obtained from the statistical analyzes on the feeling of self-efficacy variables showed a significant effect of the system on the educational practices of the trainees involved in the training activities. Indeed, the device has increased their sense of self-efficacy in keeping students engaged in learning situations more than their student counterpart at 'Higher Institute of Sport and Physical Education (Ksar Saïd)'.

1. Introduction Literature review

Over the past two decades, researchers in the field of psycho education (Ménard, L., Legault, F. & Dion, J-S., 2012) have investigated the influence of teachers' feelings of self-efficacy on their educational practices and student learning, their motivation as well as their commitment and therefore their success. The concept introduced by Bandura (1977, 1986) states that self-efficacy beliefs directly guide our choice of decisions, our perseverance, our vulnerability to stress and the nature of our life choices (Gaudreau et al., 2012). The concept of self-efficacy is often presented in the literature in different ways depending on the authors. While some use the term “feeling of competence” others use expressions such as “feelings of self-efficacy or beliefs of effectiveness” or even “feelings of personal effectiveness” (Bandura, 2007; Galand and Vanlede, 2004; Menard et al, 2012). In this perspective, several researchers in the field have contributed to the definition of the concept (Ashton, 1984; Ashton and Webb, 1986; Denham and Michael, 1981; Gibson and Dembo, 1984; Soodak, Podell and Lehman, 1998 and Woolfolk and Hoy, 1990; cited by Gaudreau, 2011). In the context of this research, we will use the term sense of self-efficacy. Concept registered in the framework of the sociocognitive theory of Bandura (1977, 2003,2007), self-efficacy refers to the belief of the individual in his capacity to make decisions, to evaluate his actions before acting and to produce performance. In other words, it represents an individual's belief in their ability to succeed in a task, to act in order to control the events that affect their existence (Bandura, 1997). Thus, Monfette and Grenier (2015) point out that the feeling of self-efficacy does not refer to the actual capacities and aptitudes that the individual possesses, but rather to what the individual believes to have and is capable of accomplishing. As a result, as several researchers in the field have argued, individuals with a high sense of self-efficacy perform better and set higher goals than those with a lower sense of self-efficacy. They also tend to put in extra effort, to commit more strongly and for longer, and with less stress overcome the obstacles and constraints they encounter (Bandura, 2003; Galand and Vanlede, 2004; Gaudreau et al., 2012 ; Ménard et al., 2012). In short, those who demonstrate a higher self-efficacy are more likely to make every effort to produce the desired effects. Conversely, people who exhibit a low sense of self-efficacy perform less and persistently, find it more difficult to overcome obstacles, are more likely to be stressed and face problems more often. In the wake of work on the concept of a feeling of self-efficacy in education, research results show that this concept constitutes a major common point in most theories in the field of educational psychology (Bong & Skaalvik, 2003; Wiegfield & Eccles, 2002; Viau, 1994; cited in Galand and Vanlede, 2004). The common central idea, as the author puts forward, is that an individual's belief in his ability to perform a given task determines how he will cope with that task and the level of performance he will perform. will actually achieve. This central concept of Bandura's theory is two-dimensional in that it brings together beliefs of effectiveness (a person's perception of their ability to perform an action in a given context) and expectations of results (feeling that the actions carried out will produce the expected results) (Bandura, 2003, 2007; Gaudreau et al., 2012; Lecomte, 2004; Ménard et al., 2012; Monfette and Grenier, 2015). Thus, the success of the person in an action requires strong beliefs in his capacity to be able to anticipate a positive result. In line with what has been put forward beforehand, Gaudreau (2011) points out that “positive expectations of results encourage the person to act while negative expectations demobilize him”. Consequently, Bandura (2003) indicates that even if a person has a high level of skills and great knowledge, it is not obvious that he can be effective in his actions and demonstrate performance if his sense of self-efficacy is weak, especially in relatively difficult contexts. In the field of education, the notion of two-dimensionality is based on the one hand on the teacher's belief in the predispositions of students to produce learning even under the sometimes negative influence of the classroom climate. In other words, it is about the teacher's belief in their ability to support the learning and success of their students (Monfette, O. and Grenier, J., 2015).

2. Objectives of the study

The objective of this article is to highlight the self-efficacy belief of student interns in keeping their pupil's engaged in learning situations before and after specific training in "Body Language And Public Speaking" at the end of the initial training.

3. Methodology and locale of the study

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 we have opted for a quantitative approach based on a questionnaire.

3.1. 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. Indeed, each meeting is associated to a thematic content which was presented, worked, discussed and experimented. A training meeting implies a theoretical content followed by its implementation. By the "active experience", the trainees are asked to plan, organize and supervise teaching sequences then, outside meetings, they were invited to implement the elements of content in their training environment. In order to have a more positive effect between the experience and the learnings, successes were systematically under-lined while failures were discussed and analysed, thus allowing to make all the aspects of the training program constructive. 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, facial and facial expressions). 3) Improve the perception of self. 4) Tame, regulate stress and control the speech.

3.2. Participants :

The sample formed by student volunteers consists of a first reference group $n = 25$ (15 men, 10 women) and the second experimental group $n = 22$ (9 men, 13 women). They are students at the end of training in physical education (Registered at their third year of License in Fundamental Physical Education) and their age was 23 ± 1 year. They completed a questionnaire on two occasions during the school year 2019-2020.

3.3. The data collection process:

All the participants have signed, by accepting to participate in the study that they consent to reply to the questionnaire. The questionnaire has been completed in two times, one time before the training, and a second time one week after the end of training and probation. The questionnaire required about ten minutes to be completed. For a questionnaire, which has been used as a pretest, each one of the participants identified himself by a pseudonym in order to ensure anonymity and match the requirements.

3.4. The data collection instrument:

To collect the data, the two groups completed the French version of the Ohio State Teacher Efficacy Scale (OSTES) (Appendix 1). The questionnaire is made up of three subscales of eight items each. The first Teaching Strategies subscale measures the sense of effectiveness with regard to the teaching strategies that secondary school teachers use. The second Class Management subscale measures beliefs and practices related to classroom management that assess teachers's sense of effectiveness. The third and final subscale Pupils Engagement measures how well they feel

in their ability to keep students engaged in learning activities. Participants were asked to respond to the items using a response scale ranging from 1 (not at all) to 9 (perfectly). The choice of the OSTES questionnaire was made according to two criteria. On the one hand for its scientific validity and on the other hand because it met the needs of the training system developed for this study. In addition, what seemed as important to us was that the OSTES was recognized as an instrument for measuring teacher effectiveness (Ménard et al, 2012).

3.4.1. Validation of the questionnaire

The OSTES in its original version presented reliable and valid data in the literature. Ménard (2012) and Dubois (2014) report that in previous work, the OSTES gave on the whole scale a coefficient ranging from 0.89 to 0.93 and a specific coefficient of the three subscales which varied between 0.77 and 0.90 (Heneman III et al., 2006; Tschannen-Moran & Woolfook Hoy, 2007). The translation of the original version of the OSTES in French that we used for this study was validated in 2010 (Ménard, Legault, Ben Rhouma, Dion & Meunier, 2011). The alpha coefficients obtained in the translation of the scale were 0.76 for Instructional Strategies, 0.86 for Classroom Management and 0.78 for Pupils Engagement. The OSTES, French version, has also been validated as part of the work of DE Stercke et al. (2014) and gave an alpha coefficient for the three sub-scales of the questionnaire respectively $\alpha = 0.82$, $\alpha = 0.89$ and $\alpha = 0.92$. In order for the questionnaire to align with our research objectives, we have decided to replace the term "student" used by Ménard in the questionnaire with the term "pupil". It should be noted that Dubois (2014) also used the term "pupil" in the French version of the OSTES questionnaire in his research work. For our present research, in order to verify the validity of the questionnaire on our population, we carried out factor analyzes. First, an internal consistency analysis was carried out using the Cronbach's alpha (α) technique. The alpha coefficients obtained are 0.96 for Teaching Strategies, 0.92 for Classroom Management and 0.96 for Pupils Engagement. For the three subscales that make up the questionnaire, the measure of the quality of the inter-item correlations is indicated by the KMO index as well as the Bartlett test which confirms that all the variables are perfectly independent of each other when the latter is significant ($p < 0.05$). The KMO indices obtained for the three sub-scales of the questionnaire are shown in the table 1.

Table 1. KMO index and Bartlett test

	Teaching Strategies	Classroom Management	Pupils Engagement
KMO index*	0,95	0,88	0,94
Bartlett test	0,00	0,00	0,00

* KMO index: ≥ 0.80 = Excellent; ≥ 0.70 = Good; ≥ 0.60 = Poor; < 0.6 = unacceptable.

3.5.Data analysis:

Regarding the responses to the questionnaire of secondary education teachers, experimental and control, obtained before and after the internship, they were analyzed and compared using the techniques of bivariate analysis of variance (ANOVA Two-Way).

4. Results

The table 2 presents the results of the descriptive analyzes of the third sub-scale of the questionnaire (Pupils Engagement) for measuring the feeling of self-efficacy as well as the results of the bivariate analyzes of variance (Two-Way ANOVA).

Table 2. Self-efficacy variation student interns to keep its students engaged.

	Experimental group		Control group		F		
	T1	T2	T1	T2	Group	Time	Group*Time
Pupils	22,7	42,17	21,84	37,12	31,40	1081,39	15,72 0,000
Engagement	(±3,25)	(±1,62)	(±2,24)	(±2,22)	0,000	0,000	

Regarding the third subscale, it relates to the ability of the student to keep students engaged in learning situations. The results of the analysis of variance performed on the dependent variable show a significant effect over time ($p < 0.05$). We also observed a significant group and time interaction effect ($p < 0.05$). In addition, the results reveal a significant effect between the two groups ($p < 0.05$). Figure 1 shows that the scores of the two groups are relatively close at the time of measurement T1 but that the mean of the experimental group has increased considerably from the time of measurement T1 to the time of measurement T2 compared to that of the Control group.

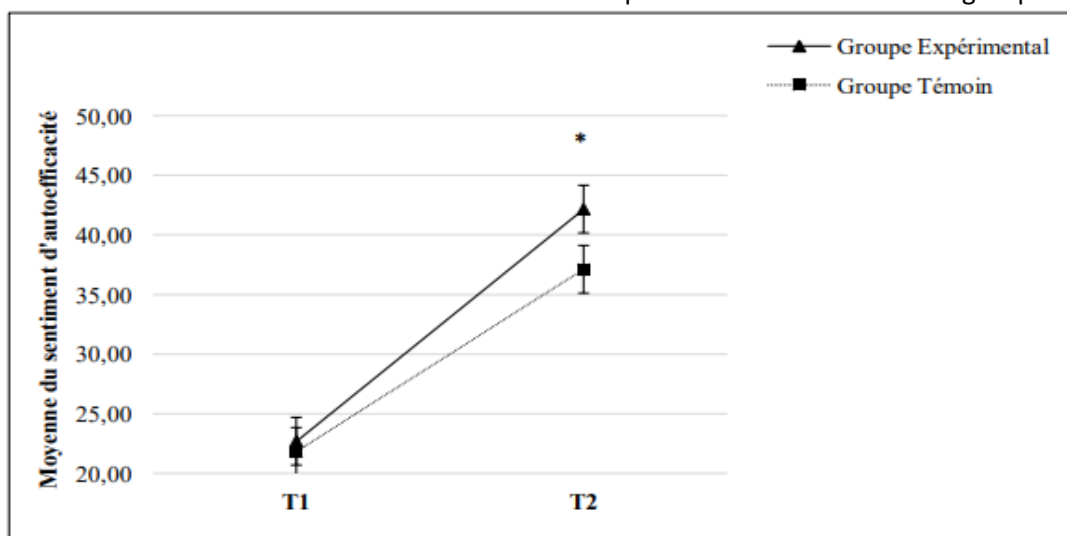


Figure 1: Group interaction and time from the feeling of self-efficacy to pupil's engagement.

* ($p < 0.05$)

5. Discussion:

For the feeling of effectiveness of the trainees in engaging their students (e.g. do you feel able during the course to interest the most difficult pupils?), the results showed a significant improvement of the trainees who took part in the device. . At the end of the internship, they also became confident. The system provided for a training component on active supervision in pedagogy, which allowed trainees to learn and practice effective strategies to arouse the interest of students and keep them engaged in the task. Thus, they felt better able to avoid disruptive behaviors from students which, by not being engaged, potentially fostered indiscipline. This is consistent in particular with the work of Doyle (1986) who discusses the importance of motivating students to learn by using effective strategies to involve them in the task. In this regard, good organization increases the focus on content and arouses the desire to learn in the student (Desbiens, J-F., Spallanzani, C., and Tourigny, J-S., 2013). In addition, the exclusive participation of the trainees in the training in "Body language and public speaking" helped to raise their feeling of self-efficacy. At the end of the internship, they were more convinced of their ability to clarify their expectations, to teach students to behave well at the start of the year, to set up routines that facilitate the development of activities and to use strategies that make students attentive and engaged in the task (Dubois, R., 2014). They were able to experience success in their practice by establishing an orderly learning climate as recommended by Archambault and Chouinard

(2009) and Wubbels (2011). As for the trainees who did not participate in the training activities of the system, their perception remained stable throughout the course. In short, the results of this present research on the positive effect of the device on the trainees' beliefs to succeed and to perform well corroborate the statements of Deaudelin et al. (2002) who reports that the feeling of self-efficacy is one of the most powerful indicators of success in training.

5. Conclusion

This research aims to develop and test a training device in 'Body language and public speaking' centered on the development and consolidation of communication skills in future teachers of physical education in Tunisia. The effectiveness of the device was evaluated based on the evolution of the feeling of self-efficacy of the student interns to keep their pupil's engaged in learning situations before and after a specific training of "Body language and public speaking" throughout the work-life preparation course.

The results obtained from the statistical analyzes on the feeling of self-efficacy variables showed a significant effect of the system on the educational practices of the trainees involved in the training activities. Indeed, the device has increased their sense of self-efficacy in keeping students engaged in learning situations more than their student counterpart at 'Higher Institute of Sport and Physical Education (Ksar Saïd)'.

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