Physical education teachers' perception of pupils' motivation

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Abstract

Motivational aspects play a particularly important role in teaching. They are considered a powerful mediator between teacher action and teaching effects. Pupils' motivation towards school and physical education has already been analysed from the pupils' point of view (Piéron, Ledent, Almond, Airstone and Newsburry, 1996). On another side, its perception by teachers is less documented. This study focused on the identification by PE teachers of pupils' behaviours indicating that they were motivated or not. Moreover, perception of reasons related to lack of motivation in pupils was also investigated. Twenty-nine teachers fulfilled a questionnaire during an inservice preparation seminar. Their answers were analysed and inductively classified in categories. Thirteen categories of criteria showing the presence or lack of motivation were identified. Motivation was predominantly perceived by (1) the quality of the working climate (16.8%); (2) the intend to be involved in the PE lesson (14%); (3) positive reactions towards the subject matter (11.2%) and an efficient time management (11.2%). The most important categories related to lack of motivation were: (1) absences or excuses (20.2%); (2) low time on task (14%) and (3) negative reactions towards the subject matter (14%). Concerning origins of the lack of motivation, teachers emphasised: (1) the large differences between pupils (13.7%); the lack of sport culture of youth (10.5%) and (3) the negative pupils' attitude towards school.

Introduction

It is common sense to emphasise the role of motivation in almost every aspect of human life. In education, increasing pupils' motivation is seen as a means enabling to fight drop out and pupils' failure. As an example, in the Belgian French speaking Community, developing pupils' motivation was a first priority in the curriculum (Ministère de l'Education, 1996).

Motivation is part of the mediating process paradigm proposed to understand improvements and learning gains in pupils (Doyle, 1988). Following this model, a teaching stimulus will only become effective when the learner wants to process it. It would explain why the affect accounted for 20-25% of the achievement variance in the school environment (Bloom, 1979).

In physical education, several studies pointed out the role of affective variables in pupils' behaviour including their motor engagement. In an experimental teaching unit, De Knop (1983) showed that pupils' motivation was related with greater gains in tennis skills. High school pupils characterised by the highest level of motivation towards physical education were the most active during regular lessons (Carreiro da Costa, Pereira, Diniz & Piéron, 1997; Ledent, Cloes, Lefèvre & Piéron, 1999). Considering that motor engagement is in significant relationship with achievement and learning gains, this finding highlights the importance of the pupils' motivation.

Motivation is related to individual external or internal sources, labelled as extrinsic and intrinsic motivation (Deci & Ryan, 1985). In physical activities, the latter was observed to be a very powerful predictor of long-term behaviours (Duda, 1992; Vallerand & Bissonnette, 1992). Intrinsic motivation for physical education was investigated under several aspects (Duda & Nicholls, 1992; Feltz & Petlichkoff, 1983; Harter, 1985; Wankel & Kreisel, 1985):

- Attitudes towards physical education, perceived importance of physical education at school and importance to be good in sport;
- Physical education objectives and enjoyment;

- Goal orientation theory (ego or task);
- Perceived competence in physical education or sport.

Findings from studies at the elementary or secondary school levels (Piéron, Cloes, Delfosse, 1994; Delfosse, Ledent, Carreiro da Costa, Telama, Almond, Cloes & Piéron, 1997) showed that European pupils had a rather favourable attitude towards school physical education. Nevertheless, both studies underlined that the situation tended to worsen during schooling.

The importance of pupils' motivation did not pass unnoticed by physical education teachers and teachers' educators. Analysing the content of a French practitioner journal, Bertone & Méard (1999) showed that 14% of the papers focused on pupils' attitude. Lack of motivation was identified, as a factor related to pupils' misbehaviours (Hardy, 2000). It explained 12.8% of the variance in the anxiety of beginning physical education teachers (Capel, 1993). Everybody knows a colleague who said that pupils are not any more motivated.

Many studies conclude that the level of pupils' attitudes towards physical education is fairly high. However, teachers' opinion is frequently far away from these pupils' view. The purpose of this study was to examine more closely what physical education teachers consider as pupils' behaviours indicating that they were motivated or not. Moreover, the perception of why pupils' lack of motivation is worth to be investigated.

Methods

An in-service teacher's programme dealing with the problem of pupils' motivation organised by the Sport pedagogy department of the University of Liège was a good opportunity to survey teachers' opinion. During the seminar, instructors encouraged participants to share their experiences and to learn new contents and strategies to be used in the gym.

Thirty secondary physical education teachers (25 females and 5 males) filled in a questionnaire asking for (1) the description of their most and least motivated classes, and (2) the identification of reasons explaining a

lack of pupils' motivation (Table 1). Their teaching experience ranged from 5 to 30 years. They taught in general education classes and/or vocational schools.

Table 1 – The questionnaire

Question 1: "What elements do you consider in identifying your most motivated class? Be as accurate as possible (avoid general terms, use concrete terms)."
Question 2: "What elements do you consider in identifying your least motivated class? Be as accurate as possible (avoid general terms, use concrete terms)."
Question 3: "In your opinion, what are the reasons for the lack of motivation? Please, consider all possible factors intervening in the situation."

Answers were analysed by two researchers and classified separately in specific systems of categories developed inductively and progressively. Each item was classified in an existing category or in a new one. After the last answer analysis, researchers grouped similar themes until independent categories remained. A third analyst completed a last check before processing data. One questionnaire was discarded because information was unusable. The test of comparison of two proportions was used (Glantz, 1988).

Results and discussion

Findings related to the first two questions will be presented simultaneously and compared. Factors describing the lack of motivation will be discussed in the second part of the paper.

Criteria indicating pupils' motivation / lack of motivation

The analysis yield to 143 items concerning elements related to pupils' motivation and 114 related to the lack of motivation (Table 2). Each teacher gave an average of 4.9 items for question # 1 and 3.9 for question # 2. The range of items ranged between 2 and 9 per answer in the first case and between 1 and 7 in the second. Teachers showed less difficulty to report positive elements than negative ones. This finding was already pointed

out in studies focusing on other aspects of teaching. Cloes & Piéron (1989) found similar differences in identifying behavioural descriptors of teachers' enthusiasm.

Table 2 – Criteria indicating pupils' motivation / lack of motivation

	Motivation criteria n = 143	Lack of motivation criteria n = 114	
Working atmosphere	16.8	11.4	
Attendance	8.4	20.2	z = 2.556; p = .011
Reaction towards activities	11.2	14.0	
Motor participation	10.5	14.0	
Time management	11.2	10.5	
Involvement	14.0	5.3	z = 2.087; p = .037
Clothing	5.6	11.4	
Desire to learn	7.0	2.6	
Class' characteristics	6.3	2.6	
Students' characteristics	2.8	5.3	
Attentiveness	4.2	1.7	
Miscellaneous	2.1	0.9	

The majority of teachers related pupils' motivation to ideal characteristics and behaviours. The similarity of items classification in motivated and non-motivated pupils was not surprising. Teachers found the same criteria identifying the presence or absence of motivation (Table 2).

Findings gave additional information to the idealistic description of motivated pupils proposed by Carlier & Brunelle (1998): *"… they (pupils) listen during information periods; they ask questions; they are active and react to the teacher's interventions; they stay concentrated on the proposed task and, even they fail;*

they want to continue to improve; they express their satisfaction at the end of the lesson and ask what will be done during the next session; finally, the talk about physical education after and outside the lesson" (p. 58). It should be noted that that description is relatively far away from real pupils' behaviours (Tousignant & Brunelle, 1982). Using ethnographic research techniques, Tousignant & Siedentop (1983) analysed the task accomplishment during physical education lessons. They identified four basic categories of student's behaviours. The first two categories ("Students engaged with the task-as-stated by the teacher" and "Students engaged in a modified task") showed similarities to the description of motivated pupils given by our findings. Moreover, the last two categories ("Students engaged in deviant off-task behaviour" and "Students acted as competent bystanders") corresponded to some aspects of the picture giving for pupils lacking of motivation.

Description of the categories

(1) Working atmosphere

The category adds up to 16.8% of the items in describing motivated classes and 11.4% in classes lacking motivation (Table 2). It included items concerning mainly discipline control and quality of teacher-pupils interactions. Motivated pupils were seen as smiling and self-disciplined. They help each other's. In classes lacking motivation, misbehaviours were frequent, pupils in conflict between them or with the teacher. Some were involved in racial segregation comments and/or avoiding to talk to the teacher.

Poor working conditions can drive to professionals' burnout. It was not surprising that teachers highlighted the quality of their relations with pupils as an important variable in relation with pupils' motivation. Teaching-learning climate was a determining factor of positive attitudes, particularly in non-sportive pupils (Gonçalves, Carreiro da Costa & Piéron, 1999). That's would support the idea of a mutual influence of pupils' motivation and warm climate, each influencing the other. We think about a cycle linking classroom climate, pupils' motivation and teacher satisfaction. Improving classroom climate makes highly probable that motivation will grow and as a consequence heighten teachers' satisfaction.

(2) Attendance

In the teachers' accountability system, Tousignant & Siedentop (1983) classified the attendance among variables accounting for minimal participation , one of the formal or informal definitions of what's the students should do to meet the class requirements. Absence and repeated excuses are worrying pupils' behaviours. For a teacher, the minimum involvement expected from a pupil is to attend the class. Presence seems logical as much as school is compulsory. On the other hand, pupils' absence or repeated excuses is perceived as a very clear indicator of lack of motivation (Verger & Gourson-Verger, 2000).

The percentage of items reported in the category was significantly higher in lack of motivation criteria than in motivation criteria (8.4 Vs 20.2%; $z = 2.556$; $p = .011$) (Table 2).

Absence of pupils brings some problems to teachers who should adjust their plans and find solutions to compensate later for the content that the pupil missed. Delfosse et al. (1997) reported that absenteeism was very high in adolescent girls. During informal discussions, several teachers working in vocational schools pointed out that it was usual that only a fourth of the students comes to the gym despite of administrative sanctions. Bauthier, Duveau & Pigeon (1999) found that 40% of the lack of motivation in poor socio-economical environment schools was characterised by frequent absences. Modifications related to maturation during the adolescence, which seemed to affect the self-perception of physical appearance (Piéron, Ledent, Almond, Airstone & Newsberry, 1996) would influence participation. As there is some general slackening of discipline in schools, students could tend to avoid annoying situations.

(3) Reactions towards activities

Accounting for 11.2% in motivation criteria and 14.0% in lack of motivation criteria, this category pointed out that teachers were sensible to the interest given by pupils to what they have planned (Table 2). When pupils ask questions about the activity, make positive comments about it in the dressing room, like activities and accept them without criticism, it is easy for teachers to think that they are motivated. In return, when they reject some activities, they choose only those characterised by low energy expenditure, the situation is perceived as unfavourable.

Selecting appropriate tasks should be a strong concern of physical education teachers when looking for pupils' motivation (Florence, 1998). This purpose consists to propose activities allowing the deep involvement and personal improvement of each pupil. The challenge for physical education teachers is to find way to meet needs and interests of many different young girls or boys. Cloes, Lapierre & Piéron (1995) showed that in a volleyball unit, an experienced teacher proposed more significant tasks than an inexperienced colleague did. Task should be (1) adapted to the pupils' skill level; (2) dynamic; (3) original, to meet the pupils' need of discovery; (4) emotionally and socially significant.

Pupils' positive reactions to efforts made by teachers to propose pleasant activities can only be perceived as a shared interest. Experts seem to be able to make the difference. Teachers' effectiveness and expertise should contribute to the development of pupils' motivation.

(4) Motor involvement

Process-product research showed that quantitative and qualitative aspects of pupils' motor engagement were criteria of effectiveness when learning was the purpose of the teaching. Moreover, motor involvement is the fundamental purpose of physical education lessons. Thus, it seems logical that pupils meeting this objective without excessive pressure of teachers are considered as motivated (Table 2). Let us recall findings of studies pointing out that pupils characterised by the most positive attitude towards physical education were more active than less motivated classmates (Carreiro da Costa et al., 1997; Ledent et al., 1999).

The level of motor engagement is rather easy to assess (through placheck or spot checking, for example). Teachers should be able to identify those pupils who participate or not, even students qualified as "competent bystanders" (Tousignant & Siedentop, 1983). These authors pointed out that when effort demonstrated by the students during lessons was the accountability criteria, more students tried hard than when they have just to be there. Again, teaching strategies are partly accountable of the presence or absence of motivated pupils' behaviour.

(5) Time management

In motivated behaviour, time management accounted for 11.2% of the items (Table 2). It corresponded to pupils' behaviours related to the increase of the time available for learning tasks: "Punctual pupils", "Managerial effectiveness". These items showed that teachers paid attention to pupils' collaboration in providing more time to exercise. Interventions aiming to decrease management time were put on a priority list. Pupils usually show little eagerness to manipulate equipment. When they do not drag out, teachers take it as a sign of interest.

On the contrary, when related to the lack of motivation that category referred to item like coming late, loosing time in the dressing room or during setting up equipment.

(6) Involvement

Data revealed significant difference among motivation criteria and non-motivated criteria (14.0 Vs 5.3%; $z = 2.087$; $p = 0.37$) (Table 2). Teachers proposed items like "Pupils asking material to practice", "Pupils come early to get more time for physical education lesson", "Pupils show disappointment when the lesson is over".

The unfavourable attitude towards physical education was connected to critics about its usefulness, to the meaning that physical education is just a recreational activity and to some lack of concern. This corresponds to the description of the usual student by many teachers. On the contrary, the comparison of European adolescents' attitudes towards physical education showed that ratios of unfavourable answers were rather low in the eight countries involved in the study (Piéron et al., 1996). This data was gathered in a general school context. In vocational sections, the problems are more acute and need further careful consideration from researchers.

(7) Other categories

Inappropriate clothing was considered as a criterion of lack of motivation (11.4%) (Table 2). It found its origin in safety and hygienic considerations. Forgetting sports shoes is a good example in which teacher can perceive lack of motivation or another means to escape the physical education lesson.

Teachers reported some presage variable among criteria of motivation/lack of motivation (Table 2). Class and students' characteristics reflect conditions leading or not to motivated classes. Homogeneity of the class (age or skill level) and class size were rather more positive than negative motivational criteria (6.3 Vs 2.6%). Individual characteristics were in larger proportion among the indicators of lack of motivation (5.3 Vs 2.8%). Mixed up, helpless and blasé pupils were cited as indicators allowing teacher to judge a class as lacking of motivation.

It underlines the importance of the research focused on personalised teaching. Paying attention to the heterogeneity of the class would be a way to increase the pupils' motivation. Nevertheless, Cloes, Pirottin, Ledent & Piéron (1999) showed that individualisation decisions were rather rare in physical education lessons.

Factors explaining the lack of motivation

Ninety-five items were reported. Teachers proposed from 0 to 7 items with an average of 3.3. A common reaction was to say that lack of motivation is complex, involving many components of the educational process: parents, school, society. Items were split up into 12 categories (Figure 1). Percentages ranged from 6.3 to 13.7, underlining the perceived role of each factor.

Teachers considered pupils as the main source of motivational problems (68.4%). School responsibility was directly (buildings and organisation class heterogeneity) or indirectly (school and teachers' characteristics) singled out (24.2%). Parents accounted only for 7.4% of the items' amount. We could make a parallel with discipline. In misbehaviour incidents, teachers ascribed the responsibility to pupils in more than 90% of the cases (Fernández Balboa, 1991).

It is easy to see them as victims of a system, but these victims do not try to change anything. For teachers, pupils' grouping was a very problematic aspect of motivation. It was evidenced in three categories ("Characteristics of some pupils", 13.7%; "Relationships between pupils", 7.4%; "Class heterogeneity", 8.4%). Several studies focused on class heterogeneity evidenced that pupils' differences were reflected in behaviours. High achieving pupils practised more than low achievers (Piéron & Forceille, 1983; Piéron, Ledent, Delfosse,

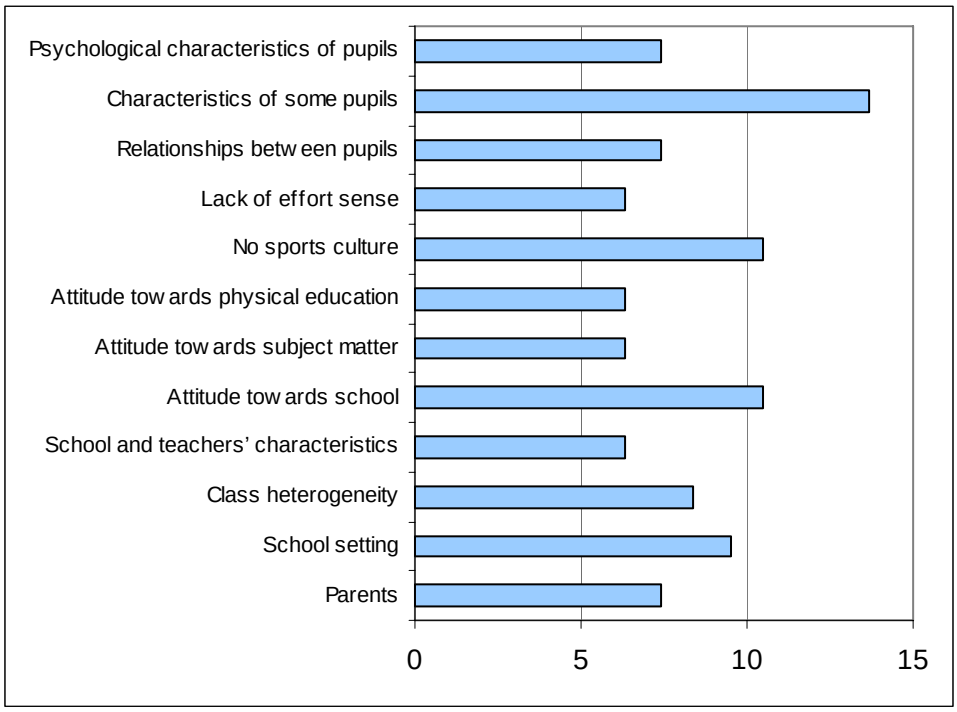

Figure 1 – Distribution of factors perceived as origin of the lack of pupils' motivation

Luts, Pirottin & Cloes, 1998). The attitudes and self-perceptions were also in favour of high achievers (Delfosse, Cloes, Luts, Ledent, Pirottin & Piéron, 1999; Luts, Ledent, Cloes & Piéron, 1999; Piéron, Ledent, Delfosse & Cloes, 2000). Without any teaching strategies allowing positive individual treatment of the students, the situation can not evolve to progress.

According to teachers, class heterogeneity would not be a source of interpersonal enrichment as it is expected by the educational curricula. On the contrary, it could cause serious difficulties.

A poor pupils' attitude was identified as a second group of categories concerned with the psychological characteristics of pupils (mixed up pupils, adolescents in crisis, lack of future perspectives), an overall lack of effort sense, the absence of a sport culture and the attitude towards physical education, school and subject matter.

Teachers' own loss of motivation or lack of in-service training were classified among the school and teachers' characteristics. That category and one related to the school setting showed that improvements would be needed to adjust school to the evolution of the society. It is reinforced by several items referenced to parents. Teachers felt that parents do not support them in those children's educational projects. Some thought also that parents do not provide the right modelling to their children.

Conclusion

The purpose of the study was to analyse the physical education teachers' perception of students' motivation or lack of motivation and their opinion about the origins of this problem.

Finding showed that pupils' motivation was mainly related to qualitative and quantitative aspects of their participation in activities. In the limits of the sample, it appeared that the attendance in classes and correct clothing arose as a minimal means in assessing the level of pupils' motivation.

The class heterogeneity was perceived as a major problem for pupils' motivation. Greater means are needed to cope with the evolution of the society. Parents should support more the school decisions while the school should adapt its strategies to teachers' and students' needs.

Relationship between teacher's motivation and involvement and perceived pupils' motivation have been highlighted several times. Studies focused on the link between both types of variables should be envisaged. Action research could help to explore some practical ways.

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