



HIERARCHY OF PHYSICAL EDUCATION GOALS AS AN EXPRESSION OF EDUCATIONAL PRIORITIES AMONG POLISH TEACHERS

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Abstract

The work of teachers has to be purposeful and well thought-out in order to achieve desired results. Both theory and practice show that achieving success must be combined with the adequate setting of educational goals and their organization within a specific hierarchy. The crucial research issue here consists of diagnosis of preferences concerning the hierarchy of physical education goals. A questionnaire developed by the European Physical Education Association has been used as the research tool. Teachers perceived the goal of "encouraging students to lead an active, healthy lifestyle" as the most important consideration. The lowest rank was applied to goals connected with shaping the social competences of pupils.

Key words: physical education, hierarchy of goals

1. Introduction

Teachers' work, as with every form of human activity, has to be purposeful and well thought-out in order to achieve assumed results. The element preceding any activity is motivation, which triggers the launch of behaviour dedicated to achieving a goal. In modern psychology, motivation to achieve has been defined in a number of ways. The definition which represents consensus from a range of perspectives is based on theses by McClelland², Heckhausen³, Atkinson and Feather⁴. The most important factor which is tied to the achievement of success, is the maintaining of an activity aimed at a selected goal over a long period of time.

Theory and practice indicate that achieving success is combined to a large extent with the setting of adequate goals; the results of research show that people without any clear long-term goals often change the direction of their actions. However, setting a long-term goal without short-term goals usually leads to idleness. According to Locke¹² and Latham¹³, people should set themselves difficult but achievable goals. In such

a situation, the goal is realised with increased persistence and great effort. However, when the goal is easy to achieve or perceived as unachievable, a lack of motivation to act occurs. The choice of goals is also connected with their value and assigning them to a specific hierarchy.

Teachers with high levels of teaching efficacy maintained personal achievement goals for their teaching even when their schools placed emphasis on conflicting goals¹⁶.

The psychological theory behind setting goals^{7,8} and the theory of motivation¹⁴ allow for pinpointing in this work the crucial research problem, in the form of diagnosing preferences concerning the hierarchy of physical education goals. Verification of the defined problem requires an answer to the following research questions:

1. Which goals of physical education have the highest declared rank according to the teachers' hierarchy?
2. Do gender and years of professional experience translate into a different hierarchy of physical education goals?

3. Does the environment of teachers' work (lower-primary school, higher-primary school, secondary school) constitute a factor influencing the hierarchy of physical education goals?
4. To what extent are the physical education goals, which have been analysed, actually achieved?

2. Methods

2.1. Participants

The research upon which this article draws, comprised 444 physical education teachers in south-west Poland working in lower-primary, higher-primary and secondary schools. The demographic characteristics of the research are shown in Table 1.

Table 1. Demographic data of the tested groups

	Female	Male	Total
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Type of school			
lower-primary	98 (22.1)	94 (21.2)	192 (43.2)
upper-primary	66 (14.9)	72 (16.2)	138 (31.1)
secondary	46 (10.4)	68 (15.3)	114 (25.7)
Years of professional experience			
≤5	46 (10.4)	20 (4.5)	66 (14.9)
6-10	36 (8.1)	62 (14.0)	98 (22.1)
≥11	128 (47.3)	152 (34.2)	280 (63.1)
Total	210 (47.0)	237 (53.0)	444 (100)

Teachers participating in the research graduated from studying a 3-year higher education course (2,700 hours of courses) and a 2-year Master's Degree course (1,500 hours of courses). Respondents were classified into three groups due to their period of professional practice in teaching as follows: beginner teachers (interns and contract teachers – up to 5 years of professional experience), nominated teachers (6-10 years of professional practice), and chartered teachers (over 11 years of professional practice). Uneven distribution reflects the present structure of employment in the system of education and results from a failure to enrol new teachers into the profession.

2.2. Measures

The method of diagnostic poll the questionnaire technique was applied in the research. The questionnaire, developed by the

European Physical Education Association (EUPEA)^{17,18}, was applied as a research tool. It comprised 13 physical education goals adopted as joint goals for European Union countries, that were presented to respondents in the following order: (1) "To develop a feeling of personal well-being/wellness"; (2) "To spread values among students which are connected to participation in sport: solidarity and fair play"; (3) "To ensure students' safety during classes"; (4) "To develop a broad repertoire of students' competence in movement"; (5) "To show to students the cross-curricular links between physical education and other school subjects"; (6) "To promote among students the social and cultural importance of sports and physical activity"; (7) "To develop students' ability to evaluate their own and others' performance"; (8) "To develop group management skills and the ability to organize

others”; (9) “To appreciate the value of fitness and health”; (10) “To develop the capacity to apply and develop skills in specific forms of physical activity”; (11) “To foster the sense of citizenship”; (12) “To provide opportunities for satisfactory participation in classes to all students, regardless of ability, gender or social and cultural background”; (13) “To encourage students to follow an active and healthy lifestyle.” The respondents’ task was to order them into a hierarchy. The second part of the questionnaire was dedicated to testing teaching results. Teachers were invited to assess the possibility of efficient realisation of the analysed goals by selecting one answer from among the following: “Unreachable”, “Partly reachable”, “Fully reachable”.

2.3. Procedures

Research was conducted by the authors with the participation of a trained group of colleagues during the period from September 2010 to the end of January 2011. The selection of the research group was deliberate and it resulted from co-operation with teachers tested at the Faculty of Physical Education and Physiotherapy of the Opole University of Technology,

concerning the education of students with whom they had contact through pedagogical internships in selected schools. Research was voluntary and teachers consent to participate was given. It was conducted in compliance with the requirements of the Bioethical Commission in Opole.

Percentage values, arithmetic mean and standard deviations were calculated for the analysis of the data. Statistically significant differences in age, gender and years of professional experience were examined using STATISTICA 8 software, using the following analysis: the Kruskal – Wallis test and the Mann-Whitney U test.

3. Results

Classification of the goals mentioned by teachers shows a group of dominating goals (1, 4, 10, 2, 5) which have an educational nature, a group of goals concerning sports (3, 7, 11) displaying a medium value assigned in the hierarchy and a group of less frequently selected goals (12, 9, 6, 13, 8) mainly concerning social skills (see Table 2).

Table 2. Teachers’ assessment of attainability of physical education goals, *N* = 444

Hierarchy of goals	Reachability of goal			Mean range
	Unreachable <i>n</i> (%)	Partly <i>n</i> (%)	Fully <i>n</i> (%)	
1. To develop a feeling of personal well-being/wellness	14 (3.2)	356 (80.2)	74 (16.7)	3.74
4. To develop a broad repertoire of students’ competence in movement	8 (1.8)	314 (70.7)	122 (27.5)	4.89
10. To develop the capacity to apply and develop skills in specific forms of physical activity	12 (2.7)	332 (74.8)	100 (22.5)	5.77
2. To spread values among students which are connected to participation in sport: solidarity and fair play	6 (1.4)	334 (75.2)	104 (23.4)	5.93
5. To show to students the cross-curricular links between physical education and other school subjects	12 (2.7)	358 (80.6)	74 (16.7)	5.93
3. To ensure students’ safety during classes	10 (2.3)	344 (77.5)	90 (20.3)	6.79
7. To develop students’ ability to evaluate their own and others’ performance	56 (12.6)	350 (78.8)	38 (8.6)	7.05
11. To foster the sense of citizenship	30 (6.8)	350 (78.8)	64 (14.4)	7.72
8. To develop group management skills and the ability to organize others	20 (4.5)	310 (69.8)	114 (25.7)	7.85
13. To encourage students to follow an active and healthy lifestyle	36 (8.1)	360 (81.1)	48 (10.8)	8.11
6. To promote among students the social and cultural importance of sports and physical activity	34 (7.7)	294 (66.2)	116 (26.1)	8.89
9. To appreciate the value of fitness and health	14 (3.2)	326 (73.4)	104 (23.4)	8.97
12. To provide opportunities for satisfactory participation in classes to all students, regardless of ability, gender or social and cultural background	44 (9.9)	352 (79.3)	48 (10.8)	9.34

The most important among the group of dominating goals in the context of physical education were issues connected to health, which is corroborated by the selection of goal 1 as the most important in the hierarchy; it concerns preparing students for an active and healthy lifestyle. Goal (10) had third place in the hierarchy; it is also connected to health issues and emphasises the need to maintain fitness and look after one's health. Teachers perceived health aspects of physical education and lifelong activity as the most important goals in the realisation of school physical education. In the hierarchy of goals, those connected to the organisation of the didactic process and concerning safety during classes and developing a feeling of personal well-being/wellness were also ranked highly. They emphasize a broad diversity of physical exercises, educational functions and numerous requirements for the proper organization of a lesson (goals 2 and 4). Creating grounds for lifelong physical exercise recreation, which can be assured through a comprehensive skill set and the attaining of this as a result of physical education, has also been highlighted by teachers; respondents placed the goal comprising this content (5) in fifth place.

The second group comprised classification of goals which disseminate values linked to sports (such as solidarity and the fair play rule). Respondents, who assigned a special rank to those goals, perceived the promotion of various exercise activities through sport at school as important. In the third group, the least frequently selected goals, goal 12, concerning fostering the sense of citizenship was the least frequently selected; supposedly, teachers do not see a close relationship in the content of this goal with physical education. Similarly, the skill of managing a group and indicating a relationship between physical education and other school subjects was perceived as less important by teachers. It is surprising that goal 13, which touched on a very important issue concerning the creation of equal opportunities for all students regardless of ability, gender or social and cultural background, was also classified at a very low 10th place in the hierarchy (see Table 2).

Five goals which were perceived by respondents as being the most important were subject to detailed analysis; the first variable was the type of school. The most important goal in the hierarchy 1 – To encourage students to participate in an active and healthy lifestyle – received similar notes by teachers of all levels of education (lower-primary school, upper-primary school and secondary school). The analysis of multiple comparisons with the Kruskal – Wallis test has shown a value close to the significance level ($H = 6.19$, $p = 0.045$); however, detailed comparison of groups did not show statistically significant differences in the responses of teachers from various types of schools. Consequently, we have to assume that goal 1 is commonly perceived as the most important by teachers from lower-primary schools, upper-primary schools and secondary schools.

The next two places in the hierarchy were occupied by goals (4) – concerning the ensuring of students' safety during classes and (10) – appreciation of the value of fitness and health; however, no statistically significant differences were evident in the performed hierarchy depending on the type of school. The levels of education caused significant variations in teachers' answers concerning goals 2 and 5. Goal 2 ($H = 6.73$, $p = 0.035$) – to develop a feeling of personal well-being/wellness turned out to be the most important for teachers in secondary schools (the lower mean was arithmetic, while the higher was the rank of the goal). Teachers who worked with the oldest adolescents at schools perceived the fostering of a good atmosphere during classes as very important, which may have a significant impact on students' attitudes to the subject and active participation in classes. From among the three types of schools, students in secondary schools show the highest expectations of the subject and the teacher; at the same time, in this type of school, a high level of absenteeism was observed in physical education classes¹⁹. Those factors may have an impact on the high rank attributed to this goal in the performed hierarchy. They emphasise the necessity to deliver classes in such a manner as to trigger positive emotions in students and increase self-motivation to actively participation in classes. Statistically

significant differences appeared in the evaluation of this goal by secondary and primary schools ($p = 0.031$), where teachers gave the lowest ranking to this goal.

Goal 5 – to develop a broad repertoire of movement competence: the achieved result of analysis indicates that teachers of upper-primary schools have a specific need to develop the physical skills of students ($H = 20.39$, $p = 0.0000$). In upper-primary schools, this goal received the highest rank, showing the willingness to provide upper-primary school students with the largest possible resources in terms of physical skills. Students' comprehensive preparation in this scope will enable them to undertake various forms of physical activity in the future. In assigning specific ranks to this goal, responses have shown statistically significant differences among teachers of lower-primary and upper-primary schools ($p < 0.001$) and upper-primary and secondary schools ($p < 0.001$), where this goal received the lowest ranking.

Further analysis of the hierarchy of goals revealed that the years of professional experience of respondents were accounted for. The analysis of results with the application of the Kruskal – Wallis test shows that in the evaluation of five goals recognized by respondents as the most important, there were no statistically significant differences in the performed hierarchisation. Consequently, we may assume that years of professional experience did not significantly differentiate the hierarchy of the most important goals of the subject.

In the consecutive part of research, analysis was undertaken based on one further variable – gender. The findings did not reveal any statistically significant differences in the performed hierarchisation of 13 goals as well. Men and women participating in the research assigned the same rank to the analysed goals.

Hierarchisation of physical education goals was the first stage of research. Based on respondents' answers, the ranking of the particular content of goals was established revealing the picture of educational priorities. During further research, teachers were asked to provide their opinion concerning the possibility of successful realisation of the analysed goals. The answers provided were placed on a three-level

scale: "not achievable", "achievable to a satisfactory degree", "fully achievable". Based on respondents' declarations, we suggest that it is possible to achieve all the goals presented in the research to a satisfactory degree. Detailed analysis indicated that a lower level of achievability concerns the goal connected with promoting the social and cultural significance of sports and physical activity among students. Fifty six teachers (12.6%) recognized this goal as not achievable. The highest level of achievability concerned the goal which was connected to the need to assure the safety of students performing exercises during classes, with 122 teachers (27.5%) perceiving this goal as fully achievable (see Table 2).

4. Discussion

The results of research into the hierarchy of physical education goals which are presented in this work provide valuable information concerning current priorities in the scope of physical education. From among thirteen goals subject to analysis, teachers perceived the goal "to encourage students to active and healthy lifestyle" as most important. Its realisation should result in students' lifelong physical activity and healthy lifestyle. This goal has also been indicated as the most important in the European research, where it was accorded first place in the hierarchy¹⁷.

Researchers in European countries have assumed that the profile of students' competences may be evaluated by research into the hierarchy of subject goals with the aim of revealing which goals, when fully realised, ensure that students with the required competences will be able to participate actively in physical culture.

In Poland, differences between assumed and actual physical education goals were described by Bukowiec²¹ who, based on research, drew the conclusion that the school system of physical education is inefficient in preparing students for participation in physical culture.

Bronikowski²² reported similar results in his research among physical education teachers into the realisation of operational goals according to their hierarchisation among respondents. He

observed that the most important goals were those concerning shaping attitudes, followed by goals connected to movement skills. In the opinion of five Polish theoreticians of physical education participating in the research by Frołowicz²³, the most important subject goal turned out to be developing recreation competences, and next, health competences. The author described recreation competences as “forming an individual who understands the meaning and also knows valuable manners of recreation after work and has a rest with the benefit for his body” 23 (p.59). Similar answers were provided by teachers participating in this research: 75% of them perceived recreation competences as the most important, followed by medical competences (prophylaxis) and finally, health competences.

Teachers in south-west Poland gave the lowest ranking to social competences. Fostering the sense of citizenship, developing group management skills and the ability to organize others and actions connected with indicating links among physical education and other school subjects were perceived as being the least important. In the evaluation of those goals, the same tendency was noticed in the European research, in which teachers from 20 participating countries provided an identical hierarchy to those goals which were placed in the last three locations of the ranking. A significant difference between the European research and the one presented in this current work concerns the goal

“to provide opportunities of satisfactory participation in classes to all students, regardless of ability, gender or social and cultural background”. Polish teachers did not pay any particular attention to the content of this goal and placed it in tenth position in the hierarchy. In the European research, this goal was placed second with its high rank possibly being connected to the fact that the population structure in European countries is different, and a greater level of ethnic and cultural diversification is observed than in Poland.

5. Conclusions

1. The priority of Polish physical education teachers is to encourage students to take an active and healthy lifestyle.
2. The lowest rank has been assigned to goals connected with shaping the social competences of pupils.
3. Women and men participating in the research assigned the same rank to the analysed goals.
4. Professional experience did not significantly differentiate the hierarchy of the most important goals of the subject.
5. The lower level of achievability concerns the goal connected with promoting the social and cultural significance of sports and physical activity among students.
6. The highest level of achievability was connected to the need to assure the safety of students performing exercises during classes.

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