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Motivation Toward Physical Education: What Do We Know About Change?

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Fax: +44 (0) 1509 226301 Email: C.M.Spray@lboro.ac.uk Motivation Toward Physical Education: What Do We Know About Change?

Introduction

The study of motivation in physical education has been buoyant for a number of decades in an attempt to understand and explain young people's feelings about their experiences in class and whether these experiences lead to important consequences such as learning, sport participation and performance, and engagement in physical activity more broadly. This body of work has revealed that motivation indeed has clear ramifications for a host of cognitive, emotional and behavioural factors in physical education. However, the majority of this research has merely taken a snapshot of pupils' motivation and its relationships with key variables at one moment in time. Researchers have more recently focussed to a greater extent on change in motivation by following pupils through sections of their school careers. In this article, I will identify some of the components of motivation that have been shown to change over time and their implications for teaching. These components relate to pupil differences (personal factors), as well as perceptions of the physical education class environment. A particular focus of late has been the class changes that pupils perceive across the transition from primary to secondary school and their impact on physical self-perceptions.

Pupil Differences

Achievement Goals. Pupils differ in the goals they adopt in physical education classes. Goals refer to how individuals define competence and whether they tend to focus on positive (approach) or negative (avoidance) outcomes. Both performance (e.g., striving to do better than classmates) and mastery (e.g., striving to learn, work hard

and improve) approach goals have been shown to be related to pupils' thoughts and feelings toward physical education. Mastery approach goals have been linked with a number of positive outcomes (e.g., enjoyment), whereas the results for performance approach goals have been less conclusive, suggesting they may favour some pupils but not others. Consequently, a debate has ensued about whether teachers should actively promote performance approach goals. Pupils can also develop more of a preoccupation with avoiding failure, either in terms of not doing worse than others (performance), or failing to improve at particular skills (mastery). These avoidance goals are likely to have negative consequences for motivation.

In terms of change in pupil goals, one of the more robust findings from longitudinal studies is that mastery approach goals decline i.e., striving to learn, improve and master tasks is endorsed less strongly by pupils as they progress through school. For example, Year 7 pupils reported stronger mastery approach goals than pupils in Years 8 and 9, however, the decline in these goals over a nine-month period was significantly greater among Year 7s than older pupils (Warburton & Spray, 2009). This finding suggests it is particularly desirable for physical education teachers to emphasise mastery approach goals to pupils in Year 7. Because physical education operates in a more public environment than typical classroom subjects, social comparison and performance goals are highly salient. Mastery and performance approach goals may complement each other effectively among confident pupils. Importantly, however, emphasising mastery approach goals may help buffer the negative effects of pupils adopting performance avoidance goals.

Perceptions of Competence. Perceived competence can be thought of as the response to the question 'how good am I in physical education?'. Competence can be viewed in terms of mastering a task (e.g., 'can I demonstrate the correct technique in throwing the javelin?'), personal improvement (e.g., 'can I throw the javelin farther than I did last week/year?'), or in relation to others (e.g., 'am I one of the best in my class at throwing the javelin?'). In terms of change over time, studies reveal a general decline in pupils' perceptions of competence in physical education and sport through school, with boys reporting more confidence in their abilities than girls at all ages (e.g., Warburton & Spray, 2008). This temporal trend is likely to have negative consequences. For example, Taylor and colleagues showed that, across a spring term, pupils who reported higher levels of competence experienced a greater increase in physical activity outside of the physical education class than pupils lower in perceived competence (Taylor, Ntoumanis, Standage, & Spray, 2010). However, more studies are needed into the consequences of change in perceptions of the three different types of competence. It is recommended that teachers discuss and encourage all forms of competence with pupils. Otherwise, pupils with low other-related perceived competence will see no point in trying skills and activities, or confident (normatively talented) pupils will under achieve because they do not challenge themselves to do better.

Distinctions between types of competence perceptions and achievement goals may help to understand change in pupils' motivation. The need to feel competent underpins the adoption of achievement goals. Thus, an interesting question concerns whether change in competence perceptions leads to change in pursuit of goals. Spray and Warburton (2011) found that only change in Key Stage 3 pupils' views of their

competence in relation to their peers predicted change in their adoption of goals over the course of a year. There was a positive effect of perceived competence in reference to classmates on both performance goals. So, pupils reported increased concerns with doing worse than others in their class even though they felt more able in physical education. If these pupils believe they have 'more to lose', this is likely to have a detrimental impact on the quality of their physical education experience (e.g., increased anxiety and self-presentation concerns). As such, teachers should be aware of seemingly confident pupils displaying performance avoidance goals and attempt to redirect their focus toward approach goals. The results from this investigation also imply that perceptions of greater competence in terms of mastery and personal improvement (perhaps as a result of maturational influences) do not fuel a stronger desire to strive for further improvement. On the other hand, there appear to be more robust links over time between perceptions of normative competence and striving to do better or no worse than classmates.

Environmental Changes Across the Transition to Secondary School

Educational transitions are typically associated with increasingly negative attitudes and motivation toward school. The transition to secondary school, typically occurring in English schools when pupils are eleven, represents a clear period of instability in adolescents' schooling. Significant developmental changes are encountered (particularly among girls) as well as new and unfamiliar environments (classmates, specialist teachers, curriculum activities). Of particular interest is the nature and impact of these changes on pupils' motivation toward physical education.

In a recent study, pupils perceived secondary physical education teachers to emphasise performance approach goals more, but mastery approach goals less, than Year 6 primary teachers (Spray, Warburton, & Stebbings, 2013). The finding regarding mastery approach goals may be due to specific individual task-related feedback from secondary teachers having 'less impact' compared with more general reinforcement and public praise for effort from primary teachers. However, this explanation is speculative and we need to know more about the cues children 'pick up' in assessing what the teacher values and emphasises in terms of achievement.

Spray et al. (2013) also noted that increased class-level perceptions of performance approach goals across the transfer to Year 7 were positively related to a number of physical self-perceptions (e.g., sport competence, strength, and endurance). These unexpected and possibly transient relationships could be due to a number of factors, including a less mature understanding of the notions of effort and ability among children of this age – along the lines of 'the more effort I give in trying to do better than my classmates, the more able I am'. Pupils in Year 7 may derive more positive cues about their physical abilities from trying to do better than classmates than working on specific tasks and skills in a self-referenced manner. It is possible, for instance, to show superiority over classmates whilst evidencing weak standards of proficiency and limited improvement. But why might greater emphasis by teachers on mastery approach goals not benefit pupils' physical self-perceptions (as would be predicted by theory)? Perhaps if teachers endorse self-improvement and mastery in the context of activities that are too challenging, pupils do not view their efforts positively. Again, further investigation is warranted.

In conclusion, we have started to examine motivational change in physical education and its consequences. To date, studies have been relatively short term, ranging from a few months to a year, and have either focussed on Key Stage 3 or the transition from primary to secondary school. The evidence base is somewhat limited and inconsistent, but in time, will hopefully have ramifications for designing interventions and hold implications for policy and practice. One recommendation is to adopt a more personcentred approach in order to identify clusters or sub-groups of pupils 'at risk' of low quality motivation early in their school careers. The challenge is then to help teachers recognise and address these maladaptive motivational profiles to alter the predicted trajectory of motivation and achievement.

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