Enhancing Teacher Education in Physical Education: A Values Perspective

Nick G. Aplin & Ian R. Haslam
School of Physical Education
NIE/Nanyang Technological University

Introduction

The inspiration for this conceptual paper is derived from research into the values associated with participation and performance in sport in Singapore. Values have been shown to play a small yet significant role in the motivation to play and perform in competitive sport (Aplin, 1998). It was reasoned that if values are associated with the motivation of individuals to engage in physical activity, then the same might be true for the motivation of teachers of physical education (PE) and extra-curricular activities (ECA). On the assumption that an association exists between the values of trainee PE teachers and their potential for success within the profession, this paper examines the nature of values content appropriate for emphasis in PE and ECA, and the type of training course that can prepare the young trainee teacher as a socialising agent.

This preliminary exploration is further impelled by three main issues. First, the implementation of a National Education initiative in schools that recognises the need for values education amongst young Singaporeans. As teachers are significant agents of socialisation, it is important to transmit values (such as those relating to social cohesion and discipline) through all school activities. An enhancement of the module content presented to trainee teachers might therefore be achieved with the explicit inclusion of 'values' information compatible with national and professional development. Second, the time available for the professional preparation of PE trainees is constrained by the on-going demand for new teachers. In effect, a two-year induction period permits the introduction of teachers to the schools at faster rate than a four-year course. In consequence, any programmes that can capitalise on the use of sound general values and principles, rather than extended, specific content represent an economical and efficient means of enhancing the ranks of teachers. Third, curriculum revisions that propose content reduction (and therefore emphasis on broad-based learning at the earlier stages of education) highlight the growing need for the inculcation of general concepts that underpin specific educational outcomes.

Values

Values are assumed to be guiding principles used in the pursuit of desirable goals, and are structured in a hierarchical form to enable certain 'priority' behaviours to prevail at the expense of others (Kluckhohn, 1951; Rokeach, 1973; and Schwartz, 1992). Furnham (1992) proposed that values might be conceived as a system of beliefs concerned with issues such as competence, as derived from societal demands. Values may be ultimately tied to the maintenance and augmentation of self-esteem (Braithwaite and Scott, 1991). Values are said to represent three universal requirements of existence, each of which require attention: first, individual biological needs such as movement; second, the need for co-ordinated social interaction; and third, the welfare and survival needs of groups (Schwartz, 1992). The assumption is that values vary according to different motivational goals. A number of studies have utilised the Schwartz Value Survey (1992) to examine different behavioural orientations.

As values are grouped hierarchically, it can be implied that when an individual is confronted with a conflict of interests he or she will resolve the situation by prioritising a particular value or perhaps cluster of relatively compatible values. In a typical PE context the development of recreational programmes would be guided by the prioritisation of different values than those

in an excellence programme. Schwartz (1992) suggested, for instance, that the pursuit of achievement values might conflict with the pursuit of benevolence values.

Schwartz (1992) identified 56 values and 11 individual-level motivational types. Later, with the incorporation of 'a spiritual life' into the benevolence scale, the number was reduced to ten value types (Schwartz, 1994; 1995). These requirements are shaped into goals, expressed as values, and then communicated to other members of the society. Furthermore values are considered to be trans-situational (Schwartz, 1992). Table 1 presents the 10 value types with a brief definition of each main goal (based on Schwartz, 1995).

Table 1: Definitions of 10 Value Types in terms of their Main Goal

Value type	Definition
Benevolence	Preservation and enhancement of welfare of in-group
Conformity	Self-restraint so as not to upset social equilibrium
Tradition	Total belief in prevailing cultural customs and ideas
Security	Personal and mutual safety, harmony, and stability
Power	Social status and authority over resources and other people
Achievement	Personal accomplishment based on social standards
Hedonism	A lifestyle devoted to pleasure seeking
Stimulation	Pursuit of challenge, excitement, and novelty
Self-Direction	Independent thought and action
Universalism	Understanding and concern for the welfare of the environment and people

Schwartz' (1994) findings supported three general hypotheses. First, most people make use of the 10 distinctions in value categories (high-order values shown in Figure 1) when applying values as guiding principles. Second, compatible values may be pursued and attained simultaneously. Third, some values may be in conflict with others. Figure 1 illustrates how the ten motivational types are related. Values found within each wedge make up a separate value type, for example, 'successful', 'ambitious', 'capable', and 'influential' occur within the Achievement space (but not shown in Figure 1). The ten value types are then organised on two bipolar dimensions, with each pole constituting a higher-order value type that combines two or more value types (Schwartz, 1994). For example, *universalism and benevolence* are compatible, and may be pursued simultaneously. Together they represent SELF-TRANSCENDENCE. They are in opposition to *achievement and power*, which represent SELF-ENHANCEMENT. Hedonism represents a transitional zone between self-enhancement and openness to change.
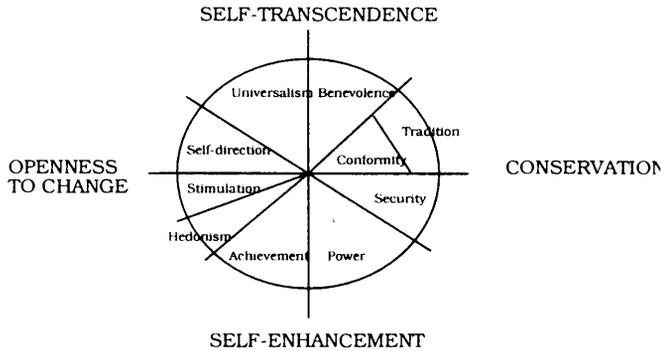
SELF-TRANSCENDENCE

Figure 1: Schwartz' Model of Individual Level Motivational Types of Values

The ten motivational types of values may represent one of three categories of 'interests'. *Power, achievement, hedonism, stimulation, and self-direction* are perceived to represent 'individual interests'. These values intuitively appear to be more closely associated with the pursuit of success in competitive sport than *universalism and security*, which are perceived to represent 'mixed' interests and *benevolence, tradition, conformity*, which are perceived to represent 'collective' interests.

Compatible value types enhance the attainment of goals, whilst competing values may provoke dissonance. For example, stimulation and self-direction both relate to intrinsic motivation for mastery and openness to change. Deci (1975) has argued that competency and the need for self-determinacy are required to sustain intrinsic motivation to participate in sport. Significantly, conflict arises when different values are in opposition, for example, the pursuit of achievement values may conflict with benevolence values: seeking personal success in sport may simultaneously obstruct actions aimed at enhancing the welfare aims of opponents through fairplay.

The Values of the PE Trainees
Students enter tertiary education with value systems that are already well defined. In view of the choice of vocation that the entry to SPE implies, it might be assumed that the fundamental value priorities expressed by the students would be, to some degree, compatible with the pre-existing sub-cultural values of PE and ECA. Nevertheless, socialisation into the PE profession still requires the learning and acceptance of new priorities.

New post-graduate students (N=53) completed the Schwartz Values survey in order for the authors to ascertain their basic values and value priorities. There is evidence to suggest that the dominant system revealed should reflect a communitarian perspective. Chang (1995) reported that Singaporean teachers tended to place greater importance on values associated with collective or communitarian interests than on individual interests.

In diagrammatic form, the results derived from the 1998 PGDE cohort, were very similar to the profiles generated from previous studies (Aplin, 1998). Figure 2 indicates the typical configuration characterised by high scores in Benevolence, and low scores in Power and Tradition.
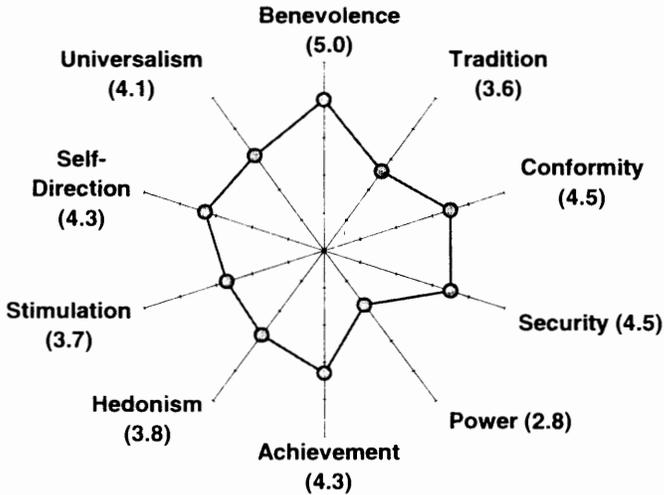
Figure 2: Basic Value System for PGDEs on entry to SPE

It is not the objective of this paper to analyse in detail the statistical findings of this small study. However, most notable from the perspective of PE teachers within the ECA context, are the relatively low scores for Self-Enhancement value types (Hedonism, Achievement, and Power), and the high scores for Conservation value types (Conformity and Security). It should be remembered that the value priorities revealed are general in nature and as such are not expected to reflect any particular association beyond that which might be expected from students who have sought to pursue the same profession. An interesting comparison might be drawn between the dominant value types and the values currently being promoted within the National Education initiative.

Values associated with the National Education Initiative
National Education is perceived to hold a special relevance to Singapore. The Minister of Education emphasised that schools should instil in the young 'a strong sense of shared identity and confidence in the future' (Teo, 1997). A National Education study (NIE/MOE, 1998) specified the types of message that evolve and should be contained within general teaching. Table 2 attempts to place elements of the National Education message within the framework of Schwartz model.

Table 2: The NE Message in Relation to the Values Types and Values in Schwartz' Model

NE Message	Schwartz Value implied	Value Type implied
Sense of belonging	Sense of Belonging	Security
Confidence in our future	Ambitious, Capable	Achievement
Meritocracy	Successful, Influential	Achievement
Incorruptibility	Honest	Benevolence
'No one owes Singapore a living'	Independent	Self-Direction
We must defend Singapore	National Security	Security
Racial and religious harmony	Equality, Inner Harmony	Universalism

Whilst it is not the intention of this paper to examine how these messages can be relayed specifically through PE and ECA, it is clear that the values instilled in these activities have direct relevance to national concerns and as such should receive the attention of the teacher. However, the values implied by the messages above represent just a selection (or core) of the possible values that exist and can be developed. The Schwartz model identifies that values are not conceived in isolation from each other, indeed their basic form (integrated as part of a system) implies that some are compatible with each other and some are potentially in conflict.

Principles of Secondary Games at SPE

In the curriculum for Post-Graduate Diploma in Education trainees (PGDEs) at the School of Physical Education, a module on the Principles of Secondary Games has been developed, which focuses on the playing of games. Currently, this module encourages a more creative yet analytical approach to specific games (McNeill, 1996). Trainees are encouraged to develop 'understanding' about the nature of games, rather than skill development, which is pursued in other modules. All of the activities in the module are linked to the three universal requirements identified by Schwartz (1992): biological needs, requisites of co-ordinated social interaction, and the demands of group functioning.

Some basic elements that form the structure of the course:
- Understanding by playing, rules, tactical awareness, decision making, skill execution, performance
- Lead-up games
- Conditioned games
- Invasion games
- Net games
- Striking games
- Safety measures
- Simple tactics in preference to extensive work on technique
- Attack and Defence
- Possession
- Risk
- Physical contact
- Competitive and recreational forms of games
- Teamwork, communication, responsibility, recovery

A selection of games is used to focus on particular principles. A variety of activities involving the use of tennis balls is introduced to increase awareness of the characteristics of ball-play. The enjoyment of individual games (bouncing, throwing, catching, and hitting) is an important learning outcome. Racket games like Squash are included to illustrate how tactical awareness can be developed even in a game where the technical demands on the beginner are considerable. Learning spatial concepts (domination of the 'T' through movement and length) is shown to go hand in hand with stroke technique. Furthermore, such activities, which require considerable elements of co-operation to maintain safety, provide the opportunity to develop respect for the well-being of opponents (universalism). Softball provides opportunities to focus on the importance of understanding rules (conformity and tradition) within the context of team games: how thinking skills are just as relevant as playing skills, when interaction with other is necessary. Touch rugby represents one of a number of contact games (others include soccer, basketball, hockey) that is explored in order to define the limits of acceptable physical interaction and conflict (power and security).

Reference to Basketball (one of the most popular games in schools) is linked to concepts of teamwork, leadership, and cohesion. In Short tennis, the nature of competition is examined in a situation, which allows every participant an equal opportunity to participate against opponents of different standards (achievement). Hockey is used to demonstrate the necessity for conformity in practice. As a potentially dangerous activity, this activity also promotes the need for safety and security amongst the participants.

Values can be viewed as principles that guide the decision making of teachers in the physical education and ECA contexts. As such values, which can be applied in any situation, provide 'short-cuts' to understanding and approved behaviours. They serve as both means and ends. In sport, the concept of transfer, by which the understanding of skill development and tactical appreciation in one activity can be applied to different games, is an example of the use of values.

Values specific to the PE and ECA Context

In order to assess the relevancy of values to the experiences of the trainees, the participants were asked at the end of the course which values they perceived to be important within the separate contexts of the PE and sport teaching. A prioritisation of different key values would infer that characteristic behaviours within each of these spheres are guided by different priorities.

General perceptions of the environment for physical activity in schools suggests that PE is characterised as involving large numbers, heterogeneity of abilities (and consequently different levels of motivation), development of basic skills, limited time, a focus on fitness testing. Whilst ECA is characterised as involving smaller numbers, greater homogeneity of abilities (and possibly higher levels of motivation), the development of intermediate and advanced skills, a more extensive time allocation, and a focus on practice and competition.

An exploratory multivariate analysis of covariance (MANCOVA) was undertaken to discover if the values associated with teaching PE and ECA were different. Gender and the mean score of each individual's responses were included as covariates. Accepting that the sample size (N=53) would normally be considered too small, it was ascertained that the two contexts invoke significantly different value systems: $F(10,93) = 3.146$, p= .002. Figure 3 provides an overview of the responses to the Schwartz inventory. For the sake of brevity, the statistical values are not included.

The results indicated that at a univariate level, the trainees perceived there were only differences in the values associated with Universalism and Achievement. Self-Enhancement (in the form of Achievement) is seen as more important in ECA than in PE, whilst Self-Transcendence (in the form of Universalism) is held to be more important in PE than in ECA. The scores for Security ($F=1.401$, p=.062) and Hedonism ($F=2.927$, p=.090) indicated that further investigation with a larger sample would be warranted.

The results should not be interpreted as meaning that specific emphasis in training or teaching should be placed on any or all of the values from the Schwartz Values Survey inventory. However, there is some evidence to suggest that core values that enhance both the national and professional demands can be more readily be identified. Significantly, it can also be suggested that the promotion of adjacent values (in the model) as well as core values would reinforce the same demands, providing a wider spread of emphasis than might be provided by a small number of guiding principles.
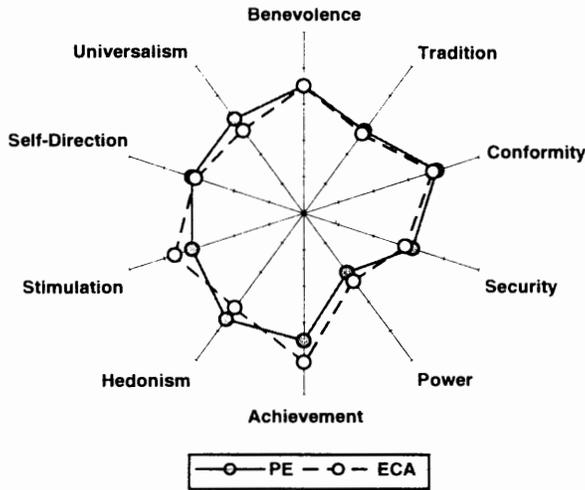
Figure 3: A comparison of the values associated with PE and ECA by PE trainees.

A brief investigation of the differences between the basic value system (taken on entry) and the systems relevant to PE and ECA suggests that the prioritisation of values in different situations takes place.

Based on descriptive statistics only, the shift in priority can be identified in Table 3 below. The figures represent the group means for each of the ten value types (signs in parentheses indicate the shift from basic values to contextual prioritisation.

Table 3: Basic Value Systems and Value Priorities in PE and ECA Contexts

Value Type	Basic Values	PE context	ECA context
Benevolence	5.0	4.5 (−)	4.6 (−)
Tradition	3.6	3.8 (+)	3.7 (+)
Conformity	4.5	4.8 (+)	4.7 (+)
Security	4.5	4.1 (−)	3.9 (−)
Power	2.8	3.0 (+)	3.3 (+)
Achievement	4.3	4.5 (+)	5.0 (+)
Hedonism	3.8	4.6 (+)	4.2 (+)
Stimulation	3.7	4.2 (+)	4.7 (+)
Self-Direction	4.3	4.2 (−)	4.1 (−)

Discussion and Conclusion
Values are used to guide decision making and the evaluation of behaviours. In the PE teaching profession, it is necessary for the individual to possess a value system that is compatible with both the institutional and the national guiding principles. Principles of Games as presented in SPE make deliberate reference to playing principles, perhaps this approach can be enhanced by the inclusion of general principles as well.

This paper has reinforced the notion that achievement and universalism are key elements within the curriculum, but it is clear that all the other values normally associated with a system have relevance too. Enjoyment (Hedonism) and challenge (Stimulation), in particular, are essential elements of programme that caters to a wide selection of children. This paper has not considered the relevance of values for different groups within schools. For example, gender differences have not been considered.

The trainees themselves are involved in two socialisation processes. First, they are enculturated by professional training, second, they become role models and agents of socialisation. From the perspective of a young teacher, principles are not only content oriented but also tools that enable information and understanding to be imparted. With particular emphasis being placed on creativity, decision making, independent thinking within the curriculum, the focus on values represents an essential component of the trainee teacher's armoury.

The authors suggest that, within the context of modules undertaken during the professional training of PE teachers, values as a medium for learning should be emphasised. The value types and values themselves should be stated explicitly as important concepts within pre-determined contexts. As illustration, it would be appropriate when explaining ethical principles to trainees to refer to Universalism or when extolling the virtue of providing fun in the class to refer to Hedonism and Stimulation. Reinforcement of values then becomes an on-going process for faculty.

The main problem that confronts trainees and pupils alike remains the ability to resolve the potential conflict that can exist between value orientations. In the context of PE and ECA an important area concerns the emphasis placed on competition and the extent to which winning and losing become important issues. Integrating national values (meritocracy) and professional values (altruism) need not necessarily represent an impossible task.

The model provided by Schwartz therefore represents a straightforward and accessible tool that can guide various aspects of teacher training. It provides explicit information about the relationships between values and the link to motivational goals. Further study of the values of practitioners is required to validate the use of this model in the day-to-day context of school. However, at the moment it represents a testable model to guide decision making and enhance the education of trainees and pupils in school.

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