

Creation, implementation, and evaluation of a values-based training program for sport coaches and physical education teachers in Singapore

Koon Teck Koh¹, Martin Camiré², Gordon A Bloom³ and CKJ Wang¹

Abstract

The purpose of the study was to create, implement, and evaluate a values-based training program for sport coaches and physical education teachers in Singapore. Four sport coaches with two to eight years of coaching experience ($M = 5.0$, $SD = 1.4$) and four physical education teachers with two to nine years of teaching experience ($M = 5.25$, $SD = 3.3$) took part in three 2-h training workshops focusing on the teaching of values to athletes and students. Following the workshops, the participants took part in an individual interview to document their perspectives of the values-based training program. Results of the thematic analysis revealed many benefits of the values-based training program, including an increased awareness of the importance of systematically teaching values through physical education and sport. Further, the participants felt better equipped to work with parents and other teachers in helping athletes and students transfer values.

Keywords

Athlete prosocial behaviour, coaching philosophy, parents, youth sport

Introduction

Values represent an array of social and moral qualities that enable human beings to fulfil themselves and live cooperatively and harmoniously with others.¹ As such, values can have a “self-regarding” feature (e.g. strong work ethic) that serves the welfare of the individual and an “other-regarding” feature (e.g. honesty, fairness) that attends to the good of others. The learning of values commences early in life, with children drawing behavioral references from surrounding individuals (e.g. members of their family, community). As they enter formal education, children spend most of their days at school and get exposed to a range of values in this setting.² Physical education and sport (PES) in schools represents an inclusive term that refers to “structured, supervised physical activities that take place at school during the school day” (see Bailey,³ p. 398). PES is often framed as a platform conducive to the development of values, given its prominence as a social activity in which youth are generally intrinsically motivated to engage.⁴ Thus, the school setting represents a key environment for teaching essential values,

in which PES has been identified as a particularly favorable context to facilitate values acquisition among students and athletes.^{3,5}

The debate on whether PES actually builds values has endured for years and remains ever fervent today. Some critics have challenged its value-building potential,⁶ perhaps as a result of research demonstrating participant decreases in value-orientations through continued sport participation.⁷ Most experts agree that participation in PES does not automatically guarantee the development of positive values.⁸ However, appropriately structured

Reviewers: Jenelle N Gilbert (California State University, Fresno, USA)
Matthew Grant (Valdosta State University, USA)

¹Physical Education & Sports Science, Nanyang Technological University, Singapore, Singapore

²University of Ottawa, Ottawa, Canada

³McGill University, Montreal, Canada

Corresponding author:

Koon T Koh, Graduate Programs, Physical Education & Sports Science, Nanyang Technological University, 1 Nanyang Walk, Singapore 637616, Singapore.

Email: koonteck.koh@nie.edu.sg

PES programs do provide powerful socializing experiences that have positive influences on multiple dimensions of students' development.⁹ Moreover, participation in PES has been associated with opportunities to learn values that include citizenship, honesty, respect, and fair play,^{4,10} as well as resiliency, integrity, and commitment.¹¹ Such values have been shown to be crucial in helping youth develop meaningful relationships with adults and peers in and beyond PES.⁴

Although PES in schools appears to offer favorable conditions that are conducive to the development of values,¹² it must be noted that the majority of scholarly work in this area hails from Western countries. Given that cultural and contextual differences may lead to adherence to different values systems,¹³ research on values education in PES beyond Western countries is warranted. In Singapore, PES (designated as physical education (PE) and co-curricular activities) is mandatory for all of the country's students between the ages of 7 and 18. In addition to mandatory PE, students must choose and regularly participate in an after school co-curricular activity (e.g. performing arts, uniformed groups, sports). Currently, a rising trend exists in students selecting sport. Hence, PES in Singapore represents a significant social platform to reach many students over an extended period of time.

Values education has been deemed a high-level priority in Singapore. Recently, the former Minister for Education, Mr Heng Swee Keat, stressed the important link between sporting excellence and values development. In his opening address at the 2013 National Schools Games, the Minister highlighted how PES must serve as a vehicle to facilitate students' learning of the values needed to succeed in adult life.¹⁴

Even though there is a clear values-education mandate in the Singapore education system, portrayals of events that undermine the very essence of competition and reveal the very worst of sport persist. For example, following the finals of a national inter-school competition, violent physical disputes occurred between school rugby players, coaches, and spectators.¹⁵ Such incidences undoubtedly lay emphasis on the notion that the outcomes of participation in PES are dependent on teachers and coaches who can significantly influence the type of learning climate created through their intentions, attitudes, and actions.^{16,17} As Camiré and Kendellen¹⁸ have recommended, those working within PES in schools must be deliberate in their approach and have strategies in place to facilitate the development of the students under their tutelage. Participation in PE can nurture the development of moral character in children, especially when activities are properly structured and values education is treated as a main priority.^{3,12,19} Despite the many positives that can accrue from values training in educational institutions, the majority of teachers and coaches have received little

to no training in this domain or in general positive youth development principles.²⁰

Recently, researchers have designed programs aimed at equipping teachers and coaches with the knowledge and tools needed to intervene effectively within PES as it relates to teaching values and other desirable attributes (e.g. life skills). For example, training programs have been implemented with soccer coaches in Australia²⁰ and the UK,²¹ in Canada with Canadian football²² and basketball coaches,²³ and in Spain with PE teachers.²⁴ Taken together, these programs have demonstrated some success in increasing teachers' and coaches' confidence and competence in facilitating their students' and athletes' development through PES. However, apart from one study reporting a values training program conducted in Singapore,¹¹ the above-mentioned training programs for teachers and coaches have all been conducted in Western countries. Koh et al.¹¹ worked with teachers and coaches from one Singapore school to integrate the school's four values of integrity, resilience, commitment, and respect. Guided by Kolb's²⁵ four-stage cycle of experiential learning, a training program was designed to facilitate the teaching of values and psychomotor skills systematically through PES. The results revealed how the participants felt they were better equipped to teach values as noted in the two-year post-program follow-up.²⁶

Given the particular features of the Singaporean PES system and the fact that values education and the holistic development of children remain high-priorities in the national agenda,²⁷ applied forms of research are warranted in this context to help teachers and coaches acquire the knowledge and tools necessary to effectively teach values. Thus, the purpose of the study was to create, implement, and evaluate a values-based training program for sport coaches and PE teachers in Singapore. To begin, a needs assessment study was conducted to better understand the needs of Singapore PE teachers and sport coaches. Following this, a 10-week values-based training program was implemented and then evaluated through individual interviews with program participants.

Creation: needs assessment study

The objective of the needs assessment study was to ensure that our training program would work well in Singapore. Ethical clearance to conduct the needs assessment was obtained from the first author's university review board and the Ministry of Education prior to commencement of the study. Following ethical clearance, an invitation letter was sent out to the principals of three primary and four secondary schools to recruit their PE teachers and sport coaches who were strong proponents of teaching values. The invitation letter

contained all the information related to the purpose of the study as well as the participants' rights to confidentiality and anonymity. Participants were also informed that their involvement in the study was voluntary and they were free to withdraw at any time. The six PE teachers (two females; three each from primary and secondary schools) and five sport coaches (three females; two from primary, and three from secondary schools) from seven schools (four secondary and three primary schools) recommended by their principals as exemplary teachers and coaches all agreed to be interviewed on their experiences in teaching values. These highly qualified participants were deliberately recruited for the needs assessment study to ensure that the values-based training program was informed by approaches currently being utilized in the teaching and coaching landscape within PES in Singapore. All 11 participants had 7 or more years of teaching or coaching experience. The PE teachers were all past winners of an Outstanding PE Teacher Award, and the sport coaches were all past recipients of a Sustained Achievement Award. The PE teachers were on average 45 years of age ($SD=2.55$) with an average of 18 years of teaching experience ($SD=3.1$), while the sport coaches were on average 34 years of age ($SD=10.5$) with an average 13 years of coaching experience ($SD=4.7$).

It is worth noting that the participants in the needs assessment study were different from those in the values-based training program. All needs assessment participants took part in individual semi-structured interviews conducted in English by a full-time research associate, who had eight years of experience in conducting interviews for qualitative research projects. All interviews were audio recorded and lasted an average of 75 min. The interview guide consisted of open-ended questions for the participants to elaborate on their (a) vision (e.g. Can you describe your teaching/coaching philosophy?), (b) approach (e.g. Can you describe the strategies you use to teach values?), and (c) challenges (e.g. What obstacles do you face in teaching values?) within PES in Singapore. The data were analyzed inductively using thematic analysis procedures.²⁷

The results emanating from the needs assessment study proved valuable in uncovering many intricacies related to teaching values in Singapore. The participants were all aware of the values education discourse endorsed by the Ministry of Education and recognized the inherent potential of PES as a viable environment to teach values. Consequently, the participants all discussed values education as an integral component of their teaching and coaching philosophy. Although they discussed being keenly aware of the importance of teaching values through PES, the analysis yielded few concrete examples of direct strategies used by the

participants in this regard. Most of their examples were classified as indirect, whereby tangible activities targeting the development of specific values were generally not regularly incorporated within the participants' lesson plans. Examples of high-order categories that were classified as indirect strategies included being a role model, providing encouragement, and being strict and firm. Although lower in frequency, some meaning units for direct strategies were identified and classified in high-order categories, such as setting situations to practice values and discussing the transfer of values. These direct strategies informed the development of the training program.

The participants discussed facing a number of challenges related to teaching values in PES, most notably their lack of training on how to teach values through PES. Another important challenge consisted of adapting within the multicultural society of Singapore (e.g. Malay, Chinese, or Indian), as each ethnic group has different beliefs and ways of raising their children. Based on this notion, a substantial impediment to values education consisted of finding synergy between the values promoted in PES and those instilled by parents at home. Consequently, the participants discussed the need for greater collaboration with parents, who they felt should act as resources by reinforcing at home the values taught through PES in school.

In sum, the needs assessment study revealed three main insights that shaped the design of the training program. The participants generally seemed to (a) have a good understanding of the values education discourse within Singaporean society and the importance of teaching values to students and athletes in educational institutions, (b) not regularly use direct strategies to teach values in a deliberate manner, instead resorting to a range of indirect approaches, and (c) have difficulties working with parents to ensure effective values transfer.

Implementation: values-based training program

Participants

Four sport coaches and four PE teachers from different parts of Singapore were purposefully recruited for the training program. More specifically, four participants were from primary schools (three males and one female) and four were from secondary schools (one male and three females) divided equally across the four school zones in the country. The sport coaches ranged from 31 to 51 years old ($M=38.5$, $SD=8.8$) and had between two and eight years of coaching experience ($M=5.0$, $SD=1.4$). The PE teachers ranged from 29 to 38 years old ($M=32.5$, $SD=4.3$)

and had between two and nine years of teaching experience ($M = 5.25$, $SD = 3.3$).

Procedure

Ethical clearance was obtained from the university review board and the Ministry of Education prior to commencement of the project. Following ethical clearance, an official letter of invitation was sent out to the principals of six purposefully selected primary schools and five secondary schools across the four zones in the country. Of the eight schools that responded favorably, the PES department heads were approached by the research team and asked to recommend currently active PE teachers and sport coaches who were exemplary, and would be willing to participate in the study. The letter of invitation contained all information related to the purpose of the study and the nature of participants' involvement (i.e. voluntary participation, rights to confidentiality, anonymity, and withdrawal). In all, eight participants (two PE teachers and two sport coaches each from both primary and secondary schools) agreed to participate in the study.

Based on the results of the needs assessment study and existing literature, three training workshops were conducted with the sport coaches and PE teachers. The sport coaches and PE teachers all attended the same workshops together over a three week span, based on the similarity of their needs identified in the needs assessment study. Specifically, the focus of each workshop was to (a) reinforce the importance of adopting values-based teaching and coaching philosophies to optimally promote values education, (b) use direct strategies to teach values in a deliberate manner, and (c) explore strategies to effectively work with parents and transfer values beyond PES. Care was taken to ensure that the delivery of the materials was done in a manner that touched upon the knowledge and experience of both the sport coaches and PE teachers. More specifically, the workshops were delivered by the course leader (i.e. first author) who has experience as a sport coach and physical educator. Three 2-h workshops were delivered at one week intervals and all eight participants attended the workshops in their entirety.

The participants were encouraged to immediately apply the materials they had been exposed to during the workshops to their classes/teams. They had seven weeks after the last workshop to plan and incorporate values in their lessons. The course leader conducted one on-site observation session for each participant one week after the last workshop to provide comments and guidance on their efforts to teach values. The participants were also asked to do a video recording of one 60-min lesson one week after the course leader's on-site

observation session and to send the video file to the research team for comments and feedback. These videos were thoroughly examined by members of the research team and feedback was provided to each teacher/coach. In addition, the mobile phone application WhatsApp was employed for the participants to interact with the course leader and share useful materials and information related to the project. All these initiatives were undertaken to provide continuous post-workshop support to the participants to help them apply the material they were exposed to during the workshops into their teaching/coaching practices. The regular communications between the participants and the research team helped build rapport, which was helpful at the later stage of data collection (i.e. individual interviews). Additionally, the support provided during the last seven weeks by the research team had been promised to the participants as an incentive for partaking in the study.

A value transfer card was also created to enable the participants to better engage with parents (see Appendix 1). Whenever sport coaches and PE teachers taught a new value during a lesson, students/athletes were given a card to pass on to their parents. On the card, parents were asked to indicate if their child was observed displaying that value at home. A simple yes/no response and their signatures were sought to minimize hassle and encourage a high feedback rate. The parents were given a week to return the card to the participants.

The values-based training program

The three workshops, spread over three weeks, aimed at building the capacity of sport coaches and PE teachers in teaching values through PES systematically and intentionally. Based on the needs assessment study, the workshops broadly covered the following three areas: (a) developing a values-based teaching/coaching philosophy and approach (b) strategies for the development of values through PES, and (c) teaching for transfer and communication with parents.

The *values-based teaching/coaching philosophy and approach* workshop aimed at providing the participants with a sound theoretical and practical base regarding the importance of teaching values to their students and athletes. The workshop began by reviewing some of the words and thoughts of the Minister for Education, including the link between sporting excellence and values development.¹⁴ Moreover, websites that stressed values in sport in Singapore were reviewed to explain how values are an important part of the education system, including how sport coaches and PE teachers are ideally situated to enhance their students' and

athletes' values development. Reviewing the websites set the tone for the second workshop, which focused on strategies for teaching values through PES.

The *strategies for the development of values through PES* workshop aimed at showing the participants *how* to teach values to their students and athletes. The workshop started with a summary of workshop one on how to establish positive teaching/coaching philosophy. Subsequently, participants were taught how to plan and implement activities and values concurrently through PES, using experiential learning theory.^{16,25} Specifically, a 40-min lesson plan on strategies to develop psychomotor skills (i.e. chest pass) and values (i.e. resilience, discipline, and teamwork) was shared with the participants. Moreover, results from the needs assessment study were provided, focusing on examples of direct strategies used by leading sport coaches and PE teachers in Singapore to teach values through PES. Lastly, technology was used in this workshop by including two videos produced in Asia that focused on effective forms of teaching, and encouraging the participants to use reflection as a form of self-assessment and improvement.

The *teaching for transfer and communication with parents'* workshop was geared toward identifying ways (i.e. value transfer card) of involving parents in promoting values at home that were taught in PES. The workshop initially provided the participants with information on factors that promoted or hindered the teaching of values. The course leader then addressed the challenges frequently faced in getting students and athletes to transfer the values taught in PES to the school, home, and community contexts. The format for this workshop was interactive, involving group discussions and personal reflections. At the conclusion of the workshop, the course leader explained how to use the value transfer card.

Collection

The data were intentionally collected four months after the completion of the values-based training program to give the participants time to reflect on their involvement. Each participant took part in an individual semi-structured interview at her/his school, except for one sport coach who completed the training but was not available for the exit interview for personal reasons. All interviews were conducted by a full-time research associate who was not involved in the workshops. This individual had eight years of experience in qualitative research projects. The interview guide created for the participants was composed of three sections. First, introductory questions were asked to gather demographic information and build rapport.

Second, questions were posed related to the participants' application of the values material they were exposed to during the training (e.g. Can you provide examples of strategies you have used to teach your students/athletes values? Can you elaborate on some of the challenges or obstacles you might have faced in teaching values?). Further, within this section, the participants were asked to discuss elements related to the transfer of values (e.g. What strategies do you implement in your teaching/coaching practice to teach your students/athletes how to use their values in life situations beyond PES?) and their relationships with parents and school colleagues (e.g. Do you view parents as assets or hindrances in teaching your students/athletes values through PES?; Can you describe if/how you work with teachers within the school to promote the transfer of values in the classroom?). The last section of the interview guide focused on asking participants how they believed the values-based training program could be improved. The interviews lasted on average 55 min ($R = 51-72$).

Data analysis

All interviews were audio-recorded, transcribed verbatim, and entered into the NVivo software package.²⁸ Minor edits were made to ensure confidentiality and to improve clarity of the statements. The data were inductively analyzed using thematic analysis procedures,²⁹ which generally involved identifying meaning units within the interview transcripts and then classifying them into lower-order themes and higher-order categories.^{29,30}

To begin, each interview was read line by line by the research associate to gain an overall impression of the data. Subsequently, the data were examined more closely and codes were assigned to textual sections that reflected single ideas called meaning units.^{29,30} The meaning units were sorted into lower-order themes used to describe the explicit meanings of the data, and then similar themes were arranged into higher-order categories. Members of the research team reviewed the categories, ensuring that the meaning units within each theme were conceptually aligned (i.e. internal homogeneity) and that the themes within each category were conceptually distinct (i.e. external heterogeneity). Refinement continued with the themes and categories being named and defined in a manner that allowed for a coherent and consistent account of the participants' experiences within the values-based training program. The final step consisted of producing the report, choosing particularly vivid quotes that were inserted within an analytic narrative illustrating the essence of teaching values in PES in Singapore.

Quality standards

The present study followed several guidelines established by Sparkes and Smith³¹ to ensure study quality. *Credibility* of the study was achieved by building good rapport with the participants over the 10-week duration of the training program and actively encouraging them to reflect on the material they were exposed to in the workshops. Prolonged engagement with the participants occurred as the first author delivered all three workshops, attended coaching practices and PE sessions, interacted regularly through WhatsApp, and provided feedback based on the participants' recorded practice/session. *Transparency* was achieved through-out data collection and data analysis with the first author regularly updating other members of the research team. As the project evolved over the course of several months, research team members exchanged emails and organized monthly Skype meetings to debrief training-related events. Further, an experienced qualitative researcher unrelated to the current study was sought to review the analysis. This peer suggested alternative interpretations after examining the coding process and through prolonged discussions with the research team.

Evaluation: post-program interviews

The findings are organized into four sections. First, participants' perspectives on how the training program influenced their teaching/coaching approach and strategies are explored. Second, the ways in which the training program facilitated the participants' ability to teach for transfer and work with parents are discussed. Third, the challenges faced in teaching values are addressed. Fourth, the recommendations provided by the participants to improve the training program are presented. Indicators such as PE participant 1 (PE1) and sport coach participant 1 (SC1) are used to identify participants.

Teaching/coaching approach and strategies

Overall, all the participants felt the training program provided them with much information regarding the teaching/coaching of values in PES. On this notion, one participant said: "I think it's a good project. I learned quite a bit; this program kind of forces me to use what I have learned during the ten weeks" (PE4). This same participant further explained how teaching values has always been important to him, but the training program helped him better structure his approach, saying:

I always believed in teaching values. This program really impacted me in the sense that it gives me more

structure; it kind of opens another dimension. The lessons and sharing with [course leader] gave us different options and opinions. It opened up different ways of how I can bring values in the activities. (PE4)

Six participants mentioned how they subsequently felt more confident teaching values. For example, one participant stated: "Am I more confident with my ability? Definitely more confident than before the training program... because before that I was never aware of it [teaching values]. Definitely, it's been a positive effort. It's something that's workable" (PE2). One coach reflected on his coaching behaviors prior to the training program, explaining how his approach has since evolved:

Before that, all I kept thinking was how to improve their [physical] skills. But in the end, I realized that just thinking about the skills, I forgot about other things. But once I put in values, they have to think more outside of training. Before, I didn't even bother about teaching values. If I saw them doing wrong things, I just scolded them and then moved on. It's more natural now, every lesson I try to talk about values. (SC3)

The importance of intentionally implementing strategies to teach values was the predominant learning outcome discussed by all the participants. For example, before the training program, some participants used passive approaches to teach values. However, following the training program, the teaching of values became embedded within their everyday teaching/coaching. Two participants discussed at length how they deliberately implemented strategies to teach values instead of waiting for teachable moments to arise:

I didn't exactly plan anything for values teaching. When something happened, when they fought, then I intervened. Now I don't wait for something to happen. When they are gathering, I will ask them, 'If you don't come back on time, how does that affect people? Are you respecting people's time?' It becomes a natural way of coaching now. The strategies have become a fixed structure. If not for the values-based training program, I would probably just wait for teachable moments. I wouldn't specifically link drills to certain values. (SC2)

For the teaching of values, I think it changed... more emphasis and deliberate planning in this aspect. So previously it was the case of seizing teachable moments that just happened to come up. So now we actually plan for it. Today it's a running lesson and the topic is perseverance. Before the lesson, I will give them a bit of briefing 'You know today I want to see some

perseverance. Although you may want to give up, you still want to try and push on and encourage your friends'. Then, when they come back for their cool down, I will talk to them, 'You know, how many of you feel that you have persevered today?' And then I'll ask them to share. So every lesson is very deliberate. (PE2)

Transfer and parents

In addition to increasing their awareness of the strategies needed to teach values, the participants discussed how the training program made them more mindful of values transfer. On this notion, two participants shared: "I think the main thing is that there's more awareness of teaching the students how to transfer the values learned to areas outside of school. If I talk about respect, what about at home? I can actually link them back" (SC1) and:

My objective wouldn't be met if my kids are only showing good values in PE lessons. It is considered a failure if they are not able to exhibit these values outside PE lessons, such as with other teachers or at home. (PE3)

One participant provided an example of how the training program helped her teach her students to transfer skills, in the context of giving respect to replacement teachers:

When I took up the training program, one of my initial concerns was that the values that I insist on during my training may not be translated when I'm not around. For example, when my replacement teacher comes, misbehavior starts to act up because the children respond to the teacher who is teaching. So the good thing is that I now explicitly teach them and emphasize the transfer of those values when other teachers take the team. It's evident they are better behaved by responding better to the replacement teacher. (SC2)

Another participant stated how the training program encouraged him to focus more of his attention on the transfer of values and that positive outcomes occurred at school and at home:

I was able to get feedback from other teachers saying that they [students] are a bit more focused in class; they have shown improvement in their exam results. And then we also have feedback from parents... They say that their children are much better, they're much more focused on doing their homework. (PE3)

To effectively promote the transfer of values beyond PES, the participants expressed how the training

program made them realize the importance of collaborating closely with parents. For instance, one participant discussed how the training program made him realize the benefits of including parents in the values education process:

Very often, when we call parents, it's to highlight the things they [kids] do wrong. For the girls who are in my co-curricular activities, I call parents to tell them their kids are doing certain things right. And I want their parents to try to reinforce that to their kid. Moving forward, I want to try to get the parents involved. The course leader said that we should get parents involved. (SC3)

Four participants discussed using the value transfer card and how they believed it was an effective tool for promoting the transfer of values from PES to home:

I used the card provided by the course leader for transferring of the values to home. I thought that was very interesting and I hadn't thought about it before. I told the students to write down examples of things they can do at home to show responsibility. So one student said: 'Oh, I can help wash the dishes in my own house, I vacuum my own room'. So we sent it over to the parents, the parents acknowledged. In certain cases, I received notes saying: 'Oh, thank you for doing this. That's the first time my child has helped me with housework'. I think my communication with parents is a bit more effective after the training program. (PE4)

Three participants took it upon themselves to go beyond the value transfer card by creating their own strategies to maintain open communication lines with parents. For example, one participant designed a transfer survey to be completed by parents, with the intent to assess how values transfer is occurring at home:

Next week, we want to do a survey to check with the parents on the transfer of learning at home. I think continuous collaboration and communication is essential and we need to set the context for the parents to get the importance of what we try to achieve. And after setting the context, I think regular time to touch base with the parents is important. I want to focus the survey to see the progress the kids are showing at home. (PE2)

Another participant planned to host a parent meeting to share the values he wants his athletes to learn in PES and then transfer at home:

So what I'm going to do at the beginning of the year before I start the co-curricular activities (CCA), get all

the parents down for a parent-teacher meeting, to explain to them what we want to do. Other than training, what kind of students we want to develop; vocal, confident, disciplined. I want to explain to the parents what we are trying to achieve in the CCA. It's good to let the parents know that 'If in softball they can take initiative, at home they should also see initiative. Helping your mum clean the dishes, sweep the floor when she's busy'. They should see that transfer in their home. I feel it's important to address with parents. (SC1)

Challenges

Although the participants experienced much success teaching values after the training program, they also faced an array of challenges. For example, teaching values in a multicultural society such as Singapore was considered a challenge: "There are challenges to overcome that have been set in place by family upbringing . . . understanding the culture to understand why the child is like that is important" (SC2). Another participant explained the importance of adapting to students from different cultural backgrounds:

The profile of students from my class is different. I have students from different races and religions; their behaviors and belief systems are different so I need to be sensitive to each of them. You cannot expect every student to behave in the ways you think he/she should even though you have taught them how to do so . . . their values are influenced by their parents who might teach them differently, worse still, contradicting our teaching. So you have to understand the problem and adjust your approach accordingly. (PE4)

Overall, most of the reported challenges centered on the notion of transfer. Two participants working at the primary school level believed transfer was perhaps too abstract of a concept for young children to grasp: "Age group I think plays a part. I don't think my primary school students understand the transferability of values. Because of their age, they lack the maturity. I think they don't understand" (PE2). Another challenge mentioned by the participants was getting some students to apply values. One participant questioned his ability to get his "bad behavior" students to act in manners that are consistent with the values he was trying to teach:

I think they're receptive. They find it interesting that I'm doing it [teaching values]. They are aware that I'm trying to do this. But learning-wise, it's the same minority group that keeps kicking the ball everywhere. Why is it that they can't translate that understanding

into action? That's one thing I think I need to master. Why is it that some students who seem to understand are not translating values into action? That's a challenge to me. (SC3)

Knowing whether or not values actually transfer beyond PES was deemed a challenge by the participants, with transfer being regarded as a difficult concept to evaluate. One participant shared his interrogations on the matter of assessment:

I think they've definitely learned [values] but whether they actually implement [them] in life is a different thing. From my experience in teaching, it's very hard to pinpoint where this change comes about and when. We don't know whether it's because they are just growing up, or because of our training program. Yeah, they have definitely learned [values] because after a while, they're able to explain whether the behavior is good or bad. (PE2)

Recommendations

The participants provided several recommendations that they felt would improve the overall delivery of the training program. All participants mentioned the idea of offering PE teachers and sport coaches more practical examples to teach values through PES. On this notion, one participant stated: "Tools, more resources and more examples . . . I think it's the only part that is lacking . . . show more examples so we don't need to crack our mind so much" (SC1). In addition to practical examples, the participants mentioned that having more opportunities to interact with other participants during the workshops would create environments further conducive to learning. For example, one participant elaborated on the benefits of fostering additional PE teacher/sport coach interactions:

What can benefit us is to have this kind of sharing more. We can learn from one another. There are many different approaches and methods teachers use. Sometimes, my method is restricted; I want to hear from others how they do. Maybe they have a different perspective, a different approach. It would open me up to more options. (PE1)

One participant recommended that the training program be customized to meet the needs of two different clienteles of participants; the not aware group and the aware group:

I think the workshop is a very good start to get teachers into value-based learning. I feel a lot of teachers are not

aware of it, despite the schools conducting values education. That means you need to cater to two different groups i.e., the ones not aware, with whom you have to build from the ground up, and the group that doesn't know how to implement. (PE4)

Although perhaps difficult to establish from a research perspective, two participants felt the training program should be offered over a longer time span:

I think maybe another improvement is that this whole values based training program can be introduced to a teacher/coach at a broader scope. Instead of 10 weeks, you can say we need one year. During these 10 weeks, I think that was quite pressurizing to teach values at every lesson. But I think if you do a one-year program, if you spread it out, it will be more practical. (SC2)

Another participant echoed the same sentiment, stating how she enjoyed the interactions and learning opportunities provided by the research team, but also expressing a desire to have a longer duration training program to facilitate learning of the materials:

I think I have learned quite a bit [from the project]... I am a beginning teacher, the 10 weeks allowed me to slowly link up what I have learned and put it inside my lessons. But I would need more than 10 weeks to be proficient in doing this... I will build up my resources over time but need to talk and learn from experienced people like the course leader. So, more time is definitely helpful for my development. (PE2)

Discussion

The purpose of the present study was to create, implement, and evaluate a values-based training program for sport coaches and PE teachers in Singapore. The participants reported many benefits from the training program, including a better understanding of the mechanisms leading to the positive development of values in PES. The program also led to participants' enhanced awareness and confidence in systematically teaching values to their students/athletes. Findings from the present study correspond to those of previous values training programs, highlighting the worth of programs designed to equip instructors with the knowledge and skills needed to implement values-based approaches in PES.^{11,23,26} However, the steps taken to create the current training program were original and extend the literature in several ways.

The unique feature of the present training program, when compared to others,^{11,23} was the use of a needs assessment study to create the content for the training

workshops. Best practices employed by outstanding PE teachers and sport coaches in Singapore were integrated into programming, rather than drawing solely from the existing literature, which mostly emanates from Western countries.^{9,23} Consequently, the content delivered during the workshops was informed by evidence that directly aligned with the realities of teaching values through PES in Singapore. Moreover, the training program was delivered in the participants' actual teaching and coaching environments. Thus, the training program enhancements in the current study may have influenced participants' high level of engagement in the learning process, which in turn, appeared to benefit their personal development as sport coaches/PE teachers.

Our results also suggest that the participants recognized the importance of having a systematic and deliberate approach to values education. For example, the participants were aware of how values education is a central goal of the Ministry of Education. As noted by Koh et al.,¹¹ effective values-based training programs require concerted and unified efforts from all stakeholders (e.g. government, schools, parents) to produce the best results. Based on how our training program was created, we are confident that it can be replicated with sport coaches and PE teachers across Singapore and be useful in helping schools meet the Ministry of Education's goals related to the teaching values to all school children.

The findings demonstrated how the values training program was highly useful in helping the participants view parents as assets, rather than hindrances, in the values education/transfer process. The transfer of values from PES to home was a major priority for the participants in the present study and the value transfer card proved to be a worthy tool to facilitate the teaching of values. It also served as a communication platform which directly engaged the parents in the values transfer process. The participants spoke very highly of the value transfer card because (a) it was easy to use; (b) it helped to unpack the meaning of values; and (c) it promoted the students'/athletes' autonomy in deciding how they wanted to demonstrate the values learned (from school) at home. As noted by several researchers,^{16,26,32} the transfer of values from sport to life is not automatic and thus, it must be regularly reinforced by teachers, coaches, and parents for desired outcomes to occur. Considering that parental attitudes and behaviors are highly associated with athletes' prosocial behaviors,³³ future values-based training programs for sport coaches and PE teachers must proactively involve parents in the values learning and transferring process.

Although the participants stated being better equipped to teach values following their involvement

in the training program, they did mention how they would have liked (a) more practical strategies and (b) prolonged exchanges with others. Further, some participants stated how ideally, the values-based training program should have been offered over a much longer timespan (i.e. one year). Although values transfer is a process that requires time and must be regularly reinforced for optimal learning to occur,¹⁶ interventions lasting an entire year are not always feasible from a research perspective. Alternatively, coach educators and researchers should consider establishing post-training learning networks among sport coaches and PE teachers. Such learning networks can come in the form of face-to-face meetings or alternatively, they can make use of technologies such as WhatsApp, which in the current study proved highly useful in keeping participants connected to the course leader. Online applications can serve as convenient, easy to use, and time saving tools, enabling learners to share ideas or seek advice from others.

Limitations and future research directions

The present study advances the literature in the area of values education but some limitations must be mentioned. First, the training program was created to best meet the needs of teachers and coaches in Singapore, a country presenting particular cultural, racial, and religious features, as well as the mandatory nature of PE and co-curricular activities (sport being one such activity). Consequently, although similarities may exist, the program, and its materials, may not entirely align with the social norms present in certain Western countries. Second, this study did not explore possible differences between PES. Although both settings are gathered as one fertile platform for values education in Singapore, differences in curricular structures may influence programmatic outcomes. Third, the study was cross-sectional in nature and as such, longitudinal research is needed to better understand the influence of values training program on sport coaches' and PE teachers' ability to teach values over time. Lastly, the use of Information Communication and Technologies may help to promote greater interactions and learning among PE teachers and sport coaches. Future studies are needed to examine how such technologies can indeed facilitate knowledge exchange between practitioners and, in turn, benefit the values development of school children.

Practical implications

The findings emanating from the present values-based training program have several implications for practitioners. First, involving award-winning sport coaches

and PE teachers in the program development process (i.e. needs assessment study) proved highly valuable in ensuring the workshop materials aligned with the realities of teaching/coaching PES in Singapore. Moving forward, sport coaches and PE teachers should work in concert with coach educators, researchers, and practitioners to create context-appropriate learning materials designed to enhance the teaching/coaching process, especially when programs are implemented in non-Western countries and thus may not entirely align with the practices reported in the literature. Second, the findings also demonstrated the value of proactively reaching out (i.e. value transfer card) and involving parents in the values transfer process. For several of our participants, a paradigm shift occurred during the values-based training program as they realized the worth of working with parents, given that the values learned in PES can be further internalized if regularly reinforced in multiple life domains.² Third, it is important to realize that short-duration training programs developed by researchers cannot fulfill all of sport coaches/PE teachers long-term learning needs. Consequently, sport coaches/PE teachers interested in enhancing their ability to teach values through PES are encouraged to create and nurture learning networks with their peers. Learning networks have been shown to be particularly beneficial for enhancing perceived teaching/coaching abilities and are more easily sustainable in recent years with the advent of advanced online discussion platforms.³⁴ In sum, the results of our study have practical implications for those concerned with the teaching and transfer of values in youth sport (i.e. administrators, researchers, PE teachers, sport coaches, and parents). Future investigations of this important topic, with a focus on the development of creative activities and approaches for values education in PES, are warranted.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors would like to acknowledge their appreciation to Nanyang Technological University for providing the Academic Research Fund (Project Reference: RP 2/13 KKT) for conducting this research project.

References

1. Arnold PJ. The virtues, moral education, and the practice of sport. *Quest* 1999; 51: 39–54.

2. Halstead JM and Taylor MJ. Learning and teaching about values: a review of recent research. *Cambridge J Educ* 2000; 30: 169–202.
3. Bailey R. Physical education and sport in schools: a review of benefits and outcomes. *J School Health* 2006; 76: 397–401.
4. Camiré M and Trudel P. High school athletes' perspectives on character development through sport participation. *Phys Educ Sport Peda* 2010; 15: 193–207.
5. Weiss MR, Smith AL and Stuntz CP. Moral development in sport and physical activity: theory, research, and intervention. In: Horn TS (ed.) *Advances in sport psychology*. Champaign, IL: Human Kinetics, 2008, pp.187–210.
6. Coakley J. Youth sports: what counts as “positive development?” *J Sport Soc Issues* 2011; 35: 306–324.
7. Priest RF, Krause JV and Beach J. Four-year changes in college athletes' ethical value choices in sports situations. *Res Quart Exerc Sport* 1999; 70: 170–178.
8. Danish SJ, Forneris T and Wallace I. Sport-based life skills programming in the schools. *J Appl School Psychol* 2005; 21: 41–62.
9. Fraser-Thomas J, Côté J and Deakin J. Youth sport programs: an avenue to foster positive youth development. *Phys Educ Sport Peda* 2005; 10: 19–40.
10. Fraser-Thomas J and Côté J. Understanding adolescents' positive and negative developmental experiences in sport. *Sport Psychologist* 2009; 23: 3–23.
11. Koh KT, Ong SW and Camiré M. Implementation of a values training program in physical education and sport: perspectives from teachers, coaches, students and athletes. *Phys Educ Sport Peda* 2016; 21: 295–312.
12. Shields D and Bredemeier BJL. *Character development and physical activity*. Champaign, IL: Human Kinetics, 1995.
13. Li CX, Koh KT, Wang CKJ, et al. Prosocial and anti-social behaviour in sport scale – a validation study. *Int J Sports Sci Coach* 2015; 10: 505–513.
14. Ministry of Education. Speech by Mr Heng Swee Keat at the opening ceremony of the national school games, http://pioneerjc.moe.edu.sg/cos/o.x?c=/swt_pjc/latest&func=view&rid=282 (2013).
15. AsiaOne. Rugby Fight Breaks Out Between ACS (I) and St Andrew's School, <http://news.asiaone.com/News/Education/Story/A1Story20100413-209958.html> (2010).
16. Gould D and Carson S. Life skills development through sport: current status and future directions. *Int Rev Sport Exerc Psychol* 2008; 1: 58–78.
17. Stein J, Bloom GA and Sabiston CM. Influence of perceived and preferred coach feedback on youth athletes' perceptions of team motivational climate. *Psychol Sport Exerc* 2012; 13: 484–490.
18. Camiré M and Kendellen K. Coaching for positive youth development in high school sport. In: Holt NL (ed.) *Positive youth development through sport*, 2nd edn. London: Routledge, 2016, pp.126–136.
19. Mouratidou K, Goutza S and Chatzopoulos D. Physical education and moral development: an intervention program to promote moral reasoning through physical education in high school students. *Eur Phys Educ Rev* 2007; 13: 41–56.
20. Vella SA, Oades LG and Crowe TP. A pilot test of transformational leadership training for sports coaches: impact on the developmental experiences of adolescent athletes. *Int J Sports Sci Coach* 2013; 8: 513–530.
21. Harwood C. Developmental consulting in a professional football academy: the 5Cs coaching efficacy program. *Sport Psychologist* 2008; 22: 109–133.
22. Camiré M and Trudel P. Helping youth sport coaches integrate psychological skills in their coaching practice. *Qual Res Sport Exerc Health* 2014; 6: 617–634.
23. Falcão WR, Bloom GA and Gilbert WD. Coaches' perceptions of a coach training program designed to promote youth developmental outcomes. *J Appl Sport Psychol* 2012; 24: 429–444.
24. Garcia-Calvo T, Sanchez-Oliva D, Leo FM, et al. Effects of an intervention program with teachers on the development of positive behaviours in Spanish physical education classes. *Phys Educ Sport Peda* 2015; DOI: 10.1080/17408989.2015.1043256.
25. Kolb DA. *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall, 1984.
26. Koh KT, Camiré M, Lim SH, et al. Implementation of a values training program in physical education and sport: a follow-up study. *Phys Educ Sport Peda* 2016; DOI: 10.1080/17408989.2016.1165194.
27. Tai J. Emphasise students' holistic growth: PM, <http://straitstimes.com/singapore/emphasise-students-holistic-growth-pm-lee> (accessed 16 May 2016).
28. QSR International. NVivo, Version 10 [Computer Software], Doncaster, Qualitative Solution Research, Australia, 2014.
29. Braun V and Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3: 77–101.
30. Côté J, Salmela JH, Baria A, et al. Organizing and interpreting unstructured qualitative data. *Sport Psychologist* 1993; 7: 127–137.
31. Sparkes AC and Smith B. *Qualitative research methods in sport, exercise, and health: from process to product*. New York: Routledge, 2014.
32. Allen G, Rhind D and Koshy V. Enablers and barriers for male students transferring life skills from the sports hall into the classroom. *Qual Res Sport Exerc Health* 2015; 7: 53–67.
33. Brustad RJ. Parental and peer influence on children's psychological development. In: Smoll FL and Smith RE (eds) *Children and youth sport: a biopsychosocial perspective*. Madison: Brown and Benchmark, 1996, pp.112–124.
34. Bertram R, Culver DM and Gilbert W. Creating value in a sport coach community of practice: a collaborative inquiry. *Int Sport Coach J* 2016; 3: 2–16.

Appendix I

Value transfer card

Dear parents,

Your child has learned one of the school values, i.e. RESPECT this week. It means

- Being polite, kind and caring to others.
- Honouring rules in family and school.

He/she has outlined the following plan: *(This part is to be written by the student/athlete before giving it to the parents for verification):*

- Greet family members before any meals
- Adhere to house rules

Please help to verify his/her plan by putting a tick against your child's plan based on your observation at home:

Your child's plan	Your observation at home	
	(yes)	(no)
Greet family members before any meals		
Adhere to house rules		

We hope that through this engagement, we can help your child transfer the values learned beyond school. Together, we can help to develop him/her to be a better and productive citizen who can make positive contribution to society.

Thank you for your kind assistance.

From: _____ (Name of Teacher/Coach)

Date: _____

Verified by father/mother/guidance (name): _____

Signature: _____

Date: _____