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A new curriculum model for second-level physical education: Y-PATH PE4Me

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ABSTRACT

In Ireland, physical education (PE) in the first three years of second level (12–15 years) is taught within the broader program area of Wellbeing, which necessarily influences the aims and objectives which need to be achieved. Within this context, Y-PATH PE4Me is proposed as an underpinning curriculum model to serve as an appropriate and valuable guide to aid delivery of second-level PE. Y-PATH PE4Me aims to enable every student to lead a sustained physically active life. This proposed curriculum model is facilitated by (i) utilising pedagogical strategies to foster an autonomous motivational climate, and (ii) maintaining a consistent focus on core learning outcomes, which emphasise the development of positive attitudes and motivation towards physical activity, health-related knowledge and awareness, and core movement skills. Y-PATH PE4Me offers a structured model to guide well-aligned pedagogical decisions towards the goals and philosophy of wellbeing-aligned PE.

KEYWORDS

Health; physical activity; education; adolescent; school; motivational climate

Introduction

Young (2013, p. 101) highlights the question ‘what do students have an entitlement to learn whether they are at primary or second-level school, attending university, or following a program of vocational or professional education that aims to prepare them for employment’ as a critical starting point for a discussion around curriculum theory. Similarly, Lund and Tannehill (2014) pose the question of what do students need to know and be able to do at a given point in their lives. When these questions are considered specific to the curricular subject physical education (PE), many authors have presented a variety of differing foci, depending on what is perceived as the optimal or core goal of the subject (Lund & Tannehill, 2014). For example, Metzler, McKenzie, van der Mars, Barrett-Williams, and Ellis (2013, p. 41) assert that the overall goal of PE programs at second level should be to ‘teach children and youth the knowledge, skills, and dispositions to lead an active, healthy lifestyle’. This assertion is supported in many ways within the Irish

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context, both within national PE curriculum documentation (Department of Education and Skills, 2003; National Council for Curriculum and Assessment, 2016, 2017), and also in national policy and research documents, where school PE is cited as central to tackling the national youth physical inactivity crises (Healthy Ireland, 2016; Woods et al., 2018). The justification for such an approach is well made in the context of the literature which consistently highlights the rising trends in physical inactivity, and the protective role that physical activity (PA) plays in preventing a range of chronic health conditions (Woods et al., 2018; World Health Organization, 2018). In response to such research and calls in national policy, this paper presents a curriculum model designed and taught to students in the Irish second-level school 'Junior Cycle' age range, comprising adolescents typically between 12 and 15 years of age, to help enable all young people to lead a sustained physically active life. It is important to underline at the outset however that this does not assume an 'improvement in health' as the core and sole focus of PE to the detriment of other key goals.

Tannehill, Van Der Mars, and MacPhail (2013, p. 180) define curriculum models as:

focused, theme-based, reflect a specific philosophy about what is most important in PE, and provide a framework that places the student at the centre of instructional design. They define a focus around the content, and aim toward specific, relevant and challenging learning outcomes for students.

Furthermore, the authors assert that some models are characterised as both instructional and curriculum model. Lund and Tannehill (2014) highlight that curriculum models, theme focussed and representing a particular philosophy, are the most effective way to deliver meaningful and coherent PE programs. They highlight the benefit of curriculum models, which have developed and evolved over time 'through implementation and revision by teachers and have been adapted to meet the needs of teachers and their learners' (Lund & Tannehill, 2014, p. 166). As an example of curriculum models being introduced with concurrent research (Tannehill et al., 2013), Metzler et al. (2013) presented a new curriculum model for PE for schools in the United States, entitled 'Health Optimising Physical Education' (or HOPE) (Metzler et al., 2013). The goal of HOPE was defined as helping students to 'acquire knowledge and skills for lifelong participation in physical activity for optimal health benefit'. Lund and Tannehill (2014) discuss a philosophy of PE originally offered in a presentation by Lambert in 2001, viewing the ultimate goal of PE for young people as them 'demonstrating, practicing and persisting in a physically active lifestyle' (p. 43). Lund and Tannehill (2014) further explain that in order to meet this overarching goal, students will need to have learned to value and enjoy physical activity, develop sufficient movement skills and abilities, develop knowledge and awareness around how and when to apply these skills in physical activity contexts, and participate cooperatively with others. In addition, it is suggested that, in this philosophy proffered by Lambert, achieving and maintaining physical fitness becomes a reciprocal by-product of participating, with participation leading to fitness, and fitness enabling participation. Lund and Tannehill (2014) define this as a 'holistic process of learning' (p. 43), whereby for students to develop practice and persist in a physically active lifestyle, they would need to also accomplish other curriculum standards.

The current paper presents an alternative curricular approach for Junior Cycle PE delivery in Ireland (first three years of second level, ages 12–15 years), and strives for

this holistic process of learning through alignment with the national wellbeing outcomes for this age cohort (NCCA, 2021). While the philosophy discussed in Lund and Tannehill (2014) was not the starting point for Y-PATH PE4Me, the two are very much aligned. ‘Y-PATH’ PE4Me (originally termed ‘Y-PATH’ until 2018) has evolved over 10 years of research and consultation between Irish PE teacher educators, school students and PE teachers in the sphere of health-related PE. The Y-PATH PE4Me program identifies the aim of PE as being to *enable every child to lead a sustained physically active life* (Belton, O’Brien, McGann, & Issartel, 2019, p. 208).

The initial Y-PATH research (which originated in Ireland in 2010) was inspired by the findings of the 2010 Children’s Sport Participation and Physical Activity (CSPPA) study (Woods, Moyna, Quinlan, Tannehill, & Walsh, 2010), which highlighted dangerously low levels of PA in Irish adolescents (12% met the 60 minutes per day moderate to vigorous PA (MVPA) guideline for health). This report highlighted the risks of low PA, and the need for targeted intervention programs to be developed to help address the issue. The original goal of the Y-PATH research program was to identify the factors influencing low levels of PA in Irish youth, and to develop a school-based intervention program to aid PE teachers in facilitating increased engagement in (and with) PA with their students (Belton, O’Brien, Meegan, Woods, & Issartel, 2014). The ongoing consultation between PE teacher educators, PE teachers, students and other stakeholders throughout the development of Y-PATH, and into the Y-PATH PE4Me program, aligns with Whittle and MacPhail’s (2020) call for ‘shared curriculum construction’; allowing for a combination of a top-down and bottom-up approach to curriculum change.

Data collected as part of the seminal Y-PATH research confirmed low levels of PA of this cohort, highlighted very low levels of fundamental movement skill (FMS) proficiency (Belton et al., 2014; Belton, O’Brien, Issartel, McGrane, & Powell, 2016; O’Brien, Belton, & Issartel, 2016), and highlighted differential PA attitudes and self-efficacy based on PA levels of participants (12–14-year-old second-level students). Based on the data collected, the literature surrounding PA interventions in youth, and the Irish PE curricular guidance documentation, the Y-PATH intervention was developed; underpinned by the Socio-Ecological Model (SEM; McLeroy, Bibeau, Steckler, & Glanz, 1988) and Self-Determination Theory (SDT; Ryan & Deci, 2000; Sánchez-Oliva, Pulido-González, Leo, González-Ponce, & García-Calvo, 2017) theoretical frameworks (Belton et al., 2019). This intersection of models recognises the role of the individual, while also recognising the influence of the many contextual factors surrounding them. Built upon Bronfenbrenner’s work asserting that human wellbeing is established through a series of reciprocal interactions between people, and between people and their social and physical environments through continuous developmental processes (McGregor, Morelli, Matsuoka, & Minerbi, 2003), the SEM recognises the complex interplay between the individual, relationship, community, and societal factors. Alongside this, SDT recognises inherent growth processes at the individual level, and as such innate psychological needs that ‘are the basis for self-motivation and personality integration, as well as for the conditions that foster those processes’ (Ryan & Deci, 2000, p. 68). Since its original development, as documented in Belton et al. (2014), the (then) Y-PATH research has been iteratively developed, refined and evaluated (Belton, McCarren, McGrane, Powell, & Issartel, 2019; Belton, O’Brien, et al., 2019; McGrane, Belton, Fairclough, Powell, & Issartel, 2018).

The Irish context for PE

In parallel to the research work being carried out on Y-PATH PE4Me over the past decade, many significant curricular changes were happening in Ireland with respect to second-level PE, starting with the Junior Cycle. Up until 2015, the only document guiding PE provision in Irish second-level schools was the Junior Cycle Physical Education (JCPE) syllabus (Department of Education and Skills, 2003, see Table 1). Between 2011 and 2015, developments saw the publication of the ‘Framework for the Junior Cycle’ (Department of Education and Skills, 2015), with a new program for this level titled ‘Wellbeing’. The Wellbeing guidelines (NCCA, 2021) are framed as both a whole school endeavour, and a compulsory area of study for all students at Junior Cycle. The Wellbeing program combines three main subject areas on the Irish curriculum of which PE is one (along with Civic, Social and Political Education, and Social, Personal and Health Education). Over the three years of the Junior Cycle, at least 300 hours of timetabled engagement must be provided by schools for the Wellbeing program, with a minimum of 135 hours within this dedicated to PE. In short, there are now three options for schools and teachers delivering PE at Junior Cycle in Ireland, all sitting under the umbrella of the Wellbeing program, and aligned with its learning outcomes. Schools can elect to continue to base their program; (i) on the JCPE syllabus (Department of Education and Skills, 2003), (ii) on the Short Course PE exemplar (NCCA, 2016) or, (iii) develop their own short course to meet the specific needs of their schools. Regardless of the option taken by the school, from 2021, teachers are required to report under Wellbeing the students’ learning achievement in PE in a Junior Cycle completion record

Table 1. Junior Cycle Physical Education syllabi in Ireland.

Focus ('Aim')	Core areas (or 'Strands')	Hours of student engagement (including assessment)
Junior Cycle Physical Education syllabus (Department of Education and Skills, 2003)		
<ul style="list-style-type: none">• ‘to contribute to the preparation of the student for a life of autonomous wellbeing’• Identifies the role that PE plays in developing ‘pathways for physical activity participation, on a day-to-day basis and in the future’	<ul style="list-style-type: none">• adventure activities• aquatics• athletics• dance• invasion games• net and fielding games• gymnastics• health-related activity	Recommended 120 minutes/week class time Syllabus recommends mix of formal assessment by PE teacher at end of year, along with informal observation, peer (skill based) assessments, and self-assessment.
NCCA PE Short Course exemplar (NCCA, 2016)		
<ul style="list-style-type: none">• ‘develop students as knowledgeable, skilful and creative participants who are confident and competent to perform in a range of activities safely’• ‘build student’s appreciation of the importance of health-enhancing and inclusive physical activity and a commitment to it now, and in the future’	<ul style="list-style-type: none">• physical activity for health and wellbeing• games• individual and team challenges• dance and gymnastics	~100 hours of student engagement (approximately 80 minutes class time per week over two years) Some assessment approaches advocated in JCPE still relevant (e.g. peer, self, teacher observation), but with move to Assessment for Learning. Students are given choice over the completion of a large summative assessment task (Classroom-Based Assessment), with a focus on key features of quality.

named ‘Junior Cycle Profile of Achievement’, comprising all areas of study of the Junior Cycle Framework.

A summary of the focus and core areas of the JCPE syllabus (Department of Education and Skills, 2003) and the NCCA PE Short Course exemplar (NCCA, 2016) are provided in Table 1.

As introduced above, PE in Ireland now sits under the area of ‘wellbeing’, which is defined in the Irish education system as both an area of study at Junior Cycle, and also a whole-school endeavour (NCCA, 2021). The NCCA Wellbeing Guidelines stipulate that:

Student wellbeing is present when students realise their abilities, take care of their physical wellbeing, can cope with the normal stresses of life, and have a sense of purpose and belonging to a wider community (NCCA, 2021, p. 5)

and highlight human flourishing as a key goal for wellbeing. An underpinning philosophy of flexibility, empowering schools to make decisions based on local contextual needs of their students, and to ensure student voice is heard in any such decisions, is apparent throughout the Wellbeing Guidelines (NCCA, 2021). There are six core indicators of wellbeing defined for the Wellbeing program in Ireland (NCCA, 2021), which are provided as an overview of the knowledge, skills and attitudes that students should move towards achieving in support of their wellbeing; Active, Responsible, Connected, Resilient, Respected and Aware. Particularly, those Wellbeing Guidelines explicitly support Lundy’s (2007) model of student voice focusing on: (a) providing safe and inclusive space for student voice to be heard; (b) enabling student voice to be heard; (c) providing structures and opportunities for the relevant audience to hear student voice; and (d) ensuring that student voice actually has an Influence on their wellbeing. In the context of teaching and learning, the Wellbeing Guidelines (NCCA, 2021, p. 29) state that wellbeing-focused teaching and learning ‘is democratic and students have a voice in relation to teaching, learning, assessment and reporting on a day-to-day basis’. This becomes especially visible in the NCCA PE Short Course (2016) in relation to the students’ choice of activities and in the correspondent NCCA PE Classroom-Based Assessment guidelines (NCCA, 2017a, p. 5) ‘[t]his Classroom-Based Assessment is based on the student’s choice of one assessment from at least two assessments completed in the PE short course’. When reporting on learning at the end of the Junior Cycle, the Junior Cycle Profile of Achievement report embraces this perspective by providing a space for students and teachers to comment on ‘Other Areas of Learning’ as a qualitative statement on any curricular aspect, including for PE. In fact, the Junior Cycle for Teachers (JCT), as designated body to support (PE) teachers in implementing PE under the current Wellbeing Guidelines in Ireland, since 2020, have delivered and developed a series of continuous professional development workshops, seminars, and resources, heavily informed and led by real-life cases of PE teachers and students highlighting and reinforcing all these curricular elements.

Y-PATH PE4Me within the Irish context

The timeline of the Y-PATH intervention program was such that, when the research commenced in 2010, the JCPE syllabus (Department of Education and Skills, 2003)

presented as the only national curricular document for PE teachers to follow, when delivering PE at Junior Cycle. As Y-PATH progressed, however, the NCCA Wellbeing program (NCCA, 2017b) and the PE Short Course exemplar (NCCA, 2016) had become an important part of the landscape for Junior Cycle education in Ireland. While a two-year randomised controlled trial had proven the Y-PATH program to be effective in improving both PA and FMS levels of youth (Belton, McCarren, et al., 2019; McGrane et al., 2018), further research with teachers highlighted a clear alignment in philosophy and focus between Y-PATH and the indicators for Wellbeing at Junior Cycle (Active, Responsible, Connected, Resilient, Respected and Aware), while also supporting the original JCPE syllabus and the NCCA exemplar short course for PE (Clarke, O'Brien, Issartel, & Belton, 2017). The shifted curricular landscape highlighted the need for a refinement of the clarity and coherence of pedagogical processes for a fully aligned PE curriculum in Irish education (MacPhail & Murphy, 2017; MacPhail, Halbert, & O'Neill, 2018). Teachers and schools had many positive options for the delivery of PE content at Junior Cycle in Ireland, however, without the underpinning of definitive decision-making frameworks. The final scaling-up phase of work on the Y-PATH research program (Belton, O'Brien, et al., 2019) allowed for considerable reflection in evolving the intervention program, specifically to serve as a curriculum guide or model to assist teachers in their pedagogical decision making, to ensure that it was sufficiently flexible to be adaptable to the unique contextual needs of schools, and to ensure that students' needs were at the centre of any decisions. This phase saw the articulation of the overarching goal of PE within Y-PATH, and the articulation and evolution of 'PE4Me' as the PE based heart of the Y-PATH program, which the other core elements critically supported.

A recent study on student voice, in partnership with the NCCA (Flynn, 2017), made specific recommendations with respect to embedding a culture of listening in Irish schools, along with a sustainable structure and response to student voice. Flynn (2017) underlines that students have the potential to contribute considerable expertise when they are given the opportunity to have a say on education matters, and stressed the importance of ensuring that this is not an experience that is confined to research or occasional projects. As outlined above, the varying syllabi and program documentation relating to PE at Junior Cycle in Ireland strongly encourage student voice and choice in relation to being able to develop autonomy, and highlight the importance of contextually relevant and meaningful content within PE (Department of Education and Skills, 2003; NCCA, 2016; 2017). Within the Y-PATH PE4Me philosophy, promoting student autonomy is critical. For example, there is no prescription of specific physical activity content, notwithstanding the PE curricular structure being organised in the respective 'strands'. While learning intentions are outlined for teachers to work towards, and prompts and strategies are suggested within all 'strand areas' of the curriculum, students and teachers share a space to work together to identify how they want to go about achieving the learning outcomes. Student voice is central to the selection of content within the Dance, Games or Gymnastics ('strands') units, for example, students together with the teachers decide what content they would like to cover to work towards learning outcomes, with the pedagogies employed then for delivery of this content fostering autonomy and agency. This aligns with previous research showing how student autonomy can be embedded in teaching and learning PE, by providing students voice and choice about

curriculum, pedagogy and assessment (Beni, Fletcher, & Ní Chróinín, 2017), while aligning with student-centred approaches as a foundational value of models-based practice (Casey, 2014; Casey & MacPhail, 2018; Tannehill et al., 2013). In this perspective, the Y-PATH PE4Me model, deeply rooted in Self Determination Theory (SDT; Ryan & Deci, 2000) and in line with the curricular policy outlined above in the Irish PE context, embeds student autonomy as a psychological foundation of motivation (Hastie, Rudisill, & Wadsworth, 2013; How, Whipp, Dimmock, & Jackson, 2013; Perlman & Webster, 2011) enacted as a principle and practice to enhance students learning experiences in PE. Concurrently, Y-PATH PE4Me acknowledges that a sociological role for student voice and choice is also represented in sociocritical research (Enright & O'Sullivan, 2010; Landi, Fitzpatrick, & McGlashan, 2016) that may be considered in expanding the future possibilities of this model. Recent accounts on this evolving curricular landscape in Ireland (Coulter et al., 2020; MacPhail et al., 2018; MacPhail & Murphy, 2017), show that these new policies have been enabling new practices to unfold, and a more focussed realisation of the purpose and importance of PE. It is essential, however, to tie these threads together with teachers, students and schools, to ensure that an overarching goal and framework can be articulated and employed (Burrows, O'Sullivan, Halbert, & Scott, 2020).

The socio-ecological approach applied in Y-PATH PE4Me, consistent with McLeroy et al. (1988), chosen because of the alignment with wellbeing, recognises that behaviour is influenced by both intra-individual factors and extra-individual factors, and through application of self-determination theory alongside this, Y-PATH PE4Me was designed to empower participants through an educational climate that develops individual autonomy and competence, and that promotes a sense of belonging (relatedness) within the class and school. In describing the implications of SDT as proffered by Ryan and Deci (2000), Toshalis and Nakkula (2012) explain that

... students experience varying levels of motivation that often depend on the extent to which they feel their actions are or will be self-determined. The key contributors to feeling self-determined are experiences of competence, autonomy, and relatedness. When students feel like they can do what is being asked of them with some level of facility (competence), when they feel like they have some control over how an activity is conducted (autonomy), and when they feel meaningfully connected to those around them while doing it (relatedness), students are understood to be self-determined. (p. 9)

Toshalis and Nakkula (2012) further explain that, as levels of self-determination increase so too does the students' sense of purpose, and that student voice is inextricably interrelated with student motivation.

Y-PATH PE4Me: the active ingredients

Alexander and Luckman (2001) identified the 'Big 5' aims of PE, or the primary outcomes as (i) Personal/social Skills (including cooperation, empathy, self-discipline, self-reliance), (ii) Knowledge of Games Strategies, (iii) Values and Attitudes, (iv) Motor Skill Development, and (v) Fitness. Though originally articulated as the 'Big 5' aims in Australasia, these aims were later supported by Wallhead and O'sullivan (2005) as legitimately encapsulating the aims of PE curricula more widely internationally.

More recent discussion has seen the articulation of the importance of health-enhancing and life-enriching participation in PE for all young people (Lawson, 2018). Consistent with the above, the original research findings which informed the structure of Y-PATH PE4Me (Belton et al., 2014), highlighted the need to (i) build PA opportunities through PE that help young people to explore PA, develop positive attitudes towards PA, and develop PA self-efficacy and motivation, (ii) allow opportunities to develop knowledge and understanding on the health benefits of PA, (iii) target fundamental skill development in youth, and (iv) ensure that the PE class fosters a climate supporting autonomous motivation by providing opportunities for both student voice (being given the opportunity to express to themselves and others) and choice (being given the opportunity to make decisions about their learning and assessment that inform the teachers' pedagogies), and moves from any overemphasis on competition towards cooperation. These findings were also consistent across literature internationally (Barnett, Beurden, Morgan, Brooks, & Beard, 2009; Bauman et al., 2012; Hallal et al., 2012; Lai et al., 2014; Martins, Marques, Peralta, Palmeira, & da Costa, 2017; Salmon, Booth, Phongsavan, Murphy, & Timperio, 2007). PE4Me, as evolved from the Y-PATH intervention program, identifies the aim of PE as being to *enable every child to lead a sustained physically active life* (Belton et al., 2019, p. 208). Underpinning the stated aim, PA for enjoyment and pleasure is critical, as is developing motivation to be active, developing confidence and belief in own abilities, developing interpersonal skills and connectedness with others, developing resilience through learning to win and lose, developing foundational movement skills, and being able to identify pathways to be active both now and into the future; allowing ultimately for a pathway for both health-enhancing and life-enriching physical activity. All curricular content within Y-PATH PE4Me is approached and taught through this lens, with the guiding principles as shown below. These guiding principles, derived from and supported by the empirical Y-PATH research which has been conducted (Belton et al., 2014; Belton, Issartel, McGrane, Powell, & O'Brien, 2019; Belton, O'Brien, et al., 2019; Belton, McCarren, et al., 2019; Clarke et al., 2017; McGrane et al., 2018; McGrane, Powell, Belton, & Issartel, 2018; O'Brien, Issartel, & Belton, 2013, 2015a), represent the 'active ingredients', or 'non-negotiables' at the heart of the Y-PATH PE4Me program;

- PE is delivered as part of, and to work towards, students' wellbeing. Opportunities to contribute towards the development of the six Wellbeing indicators (Active, Responsible, Connected, Resilient, Respected and Aware) will be threaded within and across PE lessons.
- The first experience of PE for the students at second level school will be health-related, with a focus on learning and experiencing why PA is so important for a healthy body and mind, and how it contributes to wellbeing. As with the wellbeing indicators, this focus will be maintained as a non-dominant, yet consistent, common thread across all topics/strand units covered thereafter.
- Regardless of content topic/strand unit negotiated between students and teachers, PE lessons will continually prioritise learning outcomes centred on improving students' attitude towards and motivation for PA, self-efficacy, fundamental movement skills, and knowledge and understanding around the importance of PA (emphasising Active, Responsible, Connected, Aware in particular as the most aligned wellbeing

indicators). The PE topics/strand areas (games, gymnastics, etc.) therefore become the important media through which to achieve these broader goals, along with other key contextually relevant goals identified between the PE teacher and the students.

- The PE lessons will aim to develop a climate supporting autonomous motivation – all students learn that they can be active, and learn to challenge themselves and experience success within their own parameters. Autonomy, competence and relatedness, as basic psychological needs, are therefore central to the pedagogical approaches employed (emphasising all six wellbeing indicators).
- Across the three years of study guided by Y-PATH PE4Me, students will be given the opportunity to explore a broad and balanced variety of PA types (as articulated in the national NCCA syllabi), with an opportunity to develop proficiency and self-efficacy for such participation (emphasising the Active and Responsible wellbeing indicators in particular).
- Parents/guardians and teachers are recognised as role models who can have a significant influence on students' attitudes towards PA participation and wellbeing. This move from the traditional notion of the PE teacher being the person in the school with a sole responsibility for PA, fortifies the move to wellbeing as a whole school endeavour, and develops important links with the support system beyond the school.

The philosophical shift of Y-PATH PE4Me sees teachers delivering many of the same content areas as they have been used to (for example games, gymnastics, dance), but through a specific focus and purpose. That purpose being, through teaching for the wellbeing indicators, to enable every student to lead a sustained active life, and to facilitate this by (i) utilising pedagogical strategies to facilitate autonomous motivation, based on SDT (supporting autonomy, competence and relatedness), and (ii) maintaining a consistent focus of core learning outcomes which emphasise the development of attitudes and motivation, health-related PA knowledge and awareness, and development of core movement skills. Further details on the Y-PATH PE4Me's 'active ingredients' and alignment to the existing syllabi are shown in the Appended Table.

Implementing Y-PATH PE4Me: the journey so far

In Ireland, what was originally the Y-PATH research project was scaled up as Y-PATH PE4Me for national dissemination through partnership and collaboration, with a range of national stakeholders (Belton et al., 2019). Funded and managed by the Irish Heart Foundation (IHF), a charitable organisation, Y-PATH PE4Me is now offered to all schools across the Republic of Ireland, through a partnership with Dublin City University, and in collaboration with Sport Ireland (the authority tasked with the development of sport in Ireland by the Department of Transport, Tourism, and Sport), the Professional Development Service for Teachers (PDST, a support service established by the Department of Education, with responsibility for provision of continuing professional development opportunities for teachers and school leaders), and University College Cork. Please see Belton et al. (2019) for further details, along with the scale of implementation thus far (estimated reach currently of 200,000 young people across Ireland).

PE teachers sign up with their school principal's consent, and complete an online Y-PATH PE4Me continuing professional development (CPD) module which takes less than one hour. This module frames Y-PATH PE4Me, gives background data on the Irish landscape for PA in young people to explain the genesis of (and need for) the program, introduces the concept of physical literacy and motivational climate, and gives a broad overview of the PE4Me active ingredients. Following completion of the online module, PE teachers are then invited to attend a 3-hour CPD workshop (held after school in their locality), where all of the content introduced in the online module is reinforced and elaborated. This workshop combines theoretical and applied elements, to allow teachers engage with PE4Me, and to discuss practical implications for implementation. This CPD is offered free of charge to all PE teachers in Ireland, with electronic and hardcopy materials provided to the participants, once the CPD is completed. Following the CPD offering, teachers have access to the program resources, along with access to the schools' team at the IHF for questions they may have as they implement in school.

Bechtel and Sullivan (2007) highlight the importance of making principals aware of an intervention or professional development program being rolled out, and engaging them where possible in the program. This is critical for Y-PATH PE4Me, and any other such programs, to have meaningful and lasting impact for both young people, but also the school environment. The fact that Y-PATH PE4Me nests PE as part of a broader whole-school initiative, with principal consent (Belton et al., 2019), is positive in this regard. SDT (Ryan, Patrick, Deci, & Williams, 2008) underpins Y-PATH PE4Me (Belton et al., 2019), with a focus on autonomy, competence and relatedness sought throughout delivery. SDT, at its core, requires students to be engaged as active learners, and for schools and teachers to acknowledge and allow for individual needs as they facilitate the learning.

Future directions: Y-PATH PE4Me as a curriculum model

Y-PATH PE4Me was not developed with the intention of offering a curriculum model for PE, but a clear and targeted contextually relevant program to help PE teachers develop PA and FMS, along with other attributes in Irish youth (Belton et al., 2019; Belton et al., 2014; O'Brien et al., 2015b), with school PE being delivered with a wellbeing focus at the heart of this solution. What has evolved, over multiple iterations, with input from multiple stakeholders, and through alignment with national curricular reform as is described in this paper, aligns with the concept and purpose of a curriculum model (Lund & Tannehill, 2014). Lund and Tannehill (2014) propose that, typically, no single curriculum model will be sufficient for delivering an entire PE curriculum. This sentiment is reiterated by Landi et al. (2016), in their critical interrogation of the place and value of models based practice. The authors of this paper agree also with the sentiment, and propose Y-PATH PE4Me as an overarching model, which may offer an appropriate and valuable guide to many teachers for delivering much of the PE curriculum to 12–15-year-old youth (the first three years of second-level school education). Y-PATH PE4Me is not proposed, and should not be used as, a 'manual' for delivery of PE, but rather a framework to help teachers to make program related decisions and maintain a core focus and direction; critically this should not override contextually important and meaningful goals for PE at the local level.

What is essential, if Y-PATH PE4Me is employed as a curriculum model, is that an appropriate variety of instructional models be considered and utilised in alignment with the relevant learning outcomes to help guide instruction and learning within each of the PE units delivered across the years (Lund & Tannehill, 2014), as suggested in the Appended Table. Casey (2014) highlights the many benefits of using instructional models based practice in PE, with changes in attitude, efficacy, and enthusiasm among the benefits reported by teachers. It must be noted however that while various narrative systematic reviews do support this claim (Chu & Zhang, 2018; Harvey & Jarrett, 2014; Hastie, de Ojeda, & Calderón, 2011), the lack of systematic reviews on empirical research prevent far-reaching conclusions. In addition, even if models-based practice is effective, many teachers struggle with the shift to models-based practice and revert deliberately to their old pedagogies (Casey, 2014), and many teachers have been slow to adopt it (Bechtel & Sullivan, 2007). In Ireland, potentially a unique strength in this area is the structure of the NCCA Senior Cycle PE framework (non-compulsory, non-examinable PE for students 16–18 years) around six instructional models (National Council for Curriculum and Assessment, 2018), and the associated CPD which is offered in this area to PE teachers by the PDST. Indeed, the instructional models suggested in the Appendix for use in Y-PATH PE4Me refer/reflect those presented in the Senior Cycle framework. It must be underlined, as Landi et al. (2016) highlight, that there are dangers of an over-reliance on models in PE, stating ‘... models should not replace thoughtful, well-planned, and contextually based physical education programs that address a variety of curricular aims’ (p. 409). Furthermore Landi et al. (2016) highlight

Models then need to be adopted in physical education programs with care and with a thought for context. Models can make a valuable contribution to changing practices in physical education, as an addition to programs that have clearly articulated purposes, aims, and philosophies. Models should not, in our view, replace these philosophies, nor simply be strung together in an ad hoc fashion. (p. 408)

This view on models-based instruction is one fully supported within the philosophy and intent of Y-PATH PE4Me. Proffered as an overarching curriculum model, the intention is to offer a framework for PE teachers, with specified goals and aims to guide curricular and pedagogical decisions. It is the teacher and students at the local level who must work together to make decisions around content and key goals of the curriculum. The intended synergy in practice between the teacher and the students will support meaningful content rollout, while striving to ensure a balanced range of pedagogical delivery across the well-being area of learning (Hastie et al., 2013; How et al., 2013; Perlman & Webster, 2011). Y-PATH PE4Me seeks to offer a guide, but does not remove the autonomy essential to maintain contextual relevance for students.

Aligned with the principle of framing Y-PATH PE4Me within a whole-school well-being perspective, support from colleagues, principals and students can be influential in terms of teachers making and sustaining change (Bechtel & Sullivan, 2007). Following literature on the fundamental importance of coherent educational beliefs and philosophies for quality educational practices aligned to the former (Fernández-Balboa, 2009; Korthagen, 2004; Morgan & Hansen, 2008), in many instances, the issue for teachers can be the lack of an overarching and defined philosophy underpinning the purpose of the PE program in a school (Castelli & Rink, 2003). Other times, the challenge

might fall on the lack of a curriculum model, within which to make sense of the variety of instructional models being employed, and thereby ensure systematic and deliberate instructional decision making to help achieve a larger and clearly defined goal. In short, against best practices for instructional alignment (Kim & Jung, 2019; MacPhail, Tannehill, & Goc Karp, 2013), too often the instructional model is seen by teachers as a goal in itself, rather than a building block to the achievement of a larger goal. PE4Me at its core has sought to define that goal and philosophy, and offer a structured model to guide decisions that need to be made to achieve it.

Although national rollout of the Y-PATH PE4Me program commenced in 2018 in Ireland (Belton et al., 2019), in terms of applied educational practice it is still very much at an infancy phase. Certain limitations to the dissemination of this model must be acknowledged. The current format for CPD, because of financial limitations, does not allow for significant and authentic ongoing support to teachers, which is acknowledged as best practice (Armour, Quennerstedt, & Chambers, 2015), and is something that the team hope to be able to continue to improve on over the coming years. In addition, to truly integrate the Y-PATH PE4Me program across all schools in Ireland, stronger relationships with the National Council for Curriculum and Assessment (NCCA) and the Department of Education and Skills (DES), along with the Professional Development Service for Teachers (PDST), are critical. A notable strength of the Y-PATH PE4Me program's dissemination portal has been the robust 'buy-in' from Physical Education Teacher Education (PETE) at the third-level in Ireland. The outcome of this is that many of those working with undergraduate and postgraduate pre-service PE teachers in Ireland are continuously integrating the underpinning core values of the Y-PATH PE4Me program in practice in PETE content focussed on adolescent learners (at Junior Cycle level).

Conclusion

Though Y-PATH PE4Me is positioned within Irish premises, and has been developed as a framework to help teachers streamline coherence within Irish PE, the approach could be adopted and learned from at a larger scale internationally. At its core, the Y-PATH PE4Me curriculum model adopts apriori research to its inception which is a relatively novel approach to models-based practice, given that the most well-established PE models first arose as practice-based models. From a pedagogical perspective, it embraces a student-centred view through SDT, with a contextualised and systemic perspective through the Socioecological Framework. Many of the core principles of Y-PATH PE4Me, which have been derived through research-informed practice, will stand relevant to many other international contexts;

- PE is not an end goal in and of itself, but an important vehicle to work towards the larger goal of student's wellbeing, which students and teachers navigate together.
- Learning outcomes focusing on health-related activity, PA knowledge and understanding, improving self-efficacy, and attitudes towards and motivation for PA, and fundamental movement abilities are sustained within and across PE.
- Climate of PE class supports autonomous motivation, with pedagogies supporting student autonomy, competence and relatedness.

- Content areas explored within PE class offer exposure to a broad and balanced variety of PA opportunities, with students and teachers working together to select these.

The combination of a SDT and socioecological approach demands the integration of multiple information sources under an ecologically valid, research-informed curriculum model. The teacher is not at the centre of PE delivery under Y-PATH PE-4Me, rather they are a partner in the educational journey alongside the students. Other national contexts may be well placed to employ the same socioecological approach of building on the Y-PATH PE4Me overarching principles, and informing theories to facilitate a culturally and contextually relevant aligned PE curriculum model according to the relevant national policy aim. The underpinning philosophy and indeed genesis of Y-PATH PE4Me, means that employing it as a curriculum model will never be a simple case of ‘copy and paste’, but will require those choosing to implement it to carefully consider their specific context, and take that as their starting point for implementation upon which to build.

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Appendix

Table A1. Y-PATH PE4Me active ingredients

Active Ingredient	Central components	Frequency and duration	Learning Focus	Additional detail
Y-PATH PE4Me principles – <i>consistent central focus</i>	Underpinned with wellbeing focus, whole school based approach, student centred, PE teacher lead, parent and guardian outreach	Integrated across the entire 3 years of Junior Cycle under Wellbeing (age 12–15 years typically.)	<ul style="list-style-type: none"> • Learning opportunities contribute to the development of wellbeing indicators (Active, Responsible, Connected, Resilient, Respected and Aware) • PA is for everyone, and all students need to find their own path for PA. • Students shape PE learning along with their teachers. • Choice is central to all PE classes, as it is to PA participation; students voice key in identifying variety of options. • Focus on developing physical literacy, through continuously maintaining learning outcomes relating to health-related activity knowledge and understanding, developing positive attitudes, motivation, and self-efficacy for PA, mastering fundamental movement skills, and progressing (or maintaining) health related fitness. • Fostering a motivational climate through a focus on strategies to support autonomous motivation through autonomy, competence and relatedness, is the basis for all PE lessons. • Formative assessment central to lessons and units of work, self, peer and group, as well as teacher assessment. Ipsative predominantly, at least two formative tasks per unit, with continuous assessment in each lesson. • PA for health is the role of the entire school community, with parental and guardian support also critical. 	PE teacher leads the program, and recruits a core team beyond PE in the School, with the Wellbeing Coordinator also being a central figure. All of the active ingredients align with the indicators of the Wellbeing program at Junior Cycle (NCCA, 2017) Y-PATH PE4Me support materials (5 x whole school PA posters) ^ψ

(Continued)

Table A1. Continued.

Active Ingredient	Central components	Frequency and duration	Learning Focus	Additional detail
PA for health and wellbeing*	Delivered by PE teachers Health related activity (HRA) ^o , Health related fitness, Health related knowledge and understanding.	Six-week HRA focussed PE unit, at the start of each school year (in 1st, 2nd and 3rd year) at Junior Cycle (80 mins/week)	<ul style="list-style-type: none"> • PA is fun, and is for everyone. • PA is essential for maintaining a healthy body and mind. • PA is central to wellbeing, and by developing across the six indicators of wellbeing we improve our capacities to be active, and by being active we can improve across many of the indicators of wellbeing • It is possible for everyone to find a way to be active that they enjoy. • Students' bodies can move in a variety of ways. • Mastering some basic movements helps students to participate in a broader variety of activities. 	<p>These units should be highly practical. Lessons approach learning through range of activities focussing on PE strand areas (games, athletics, dance, gymnastics, outdoor and adventure).</p> <p><i>Potential instructional models:</i> Health-related physical activity/Personal and Social Responsibility/Inquiry</p> <p>3 year groups × 6 week PE4Me units of learning are available to guide (with exemplar 60 minute lesson plans for each week)^ψ</p>
Games*	Delivered by PE teachers Invasion games ^o Net games ^o	At least one six-week unit (80 mins/ week) in each of the three years. Depending on student preference, will often extend to a second unit in some years.	<ul style="list-style-type: none"> • There are a range of team, pair and individual games that are fun, and can help students to stay physically active. • Students need to build on basic fundamental movement skills to develop context-specific skills for the different sports. • Students can learn to 'spot and fix' their own physical skills and those of others. • Achievement and progress is marked against student's own last record, not against others. • Everyone has a role to play, and by working together, a team has the best chance of success. • Identifying how games are played, and developing tactical strategies, allows students to implement their skills in the most effective way. • Developing across the variety of health and performance related fitness components will help students to perform well, and also stay healthy. 	<p>Variety is critical here, advocate student choice as to games selected, but ensure variety across the years. Maintain 50% MVPA during lessons.</p> <p><i>Potential instructional models:</i> Teaching Games for Understanding/Sport Education/Personal and Social Responsibility</p> <p>12 × PE4Me HRA/FMS integration activity samples available^ψ</p>



Individual and team challenges*	Delivered by PE teacher Athletics ^o Outdoor and adventure related activities ^o	At least one six week unit (80 mins/ week) in each of the three years. Depending on student preference, may extend to a second unit in some years.	<ul style="list-style-type: none"> • Students can be physically active anywhere. • Weather needn't dictate activity, with right clothes students can still be active. • Cooperation is central to success. • If students stick with it and work together they will achieve. • All types of PA benefit students' health. 	Preferences to use outdoor available spaces. Target 50% MVPA during lessons. Potential instructional models: Sport Education/Adventure Education 6 x PE4Me HRA/FMS integration activity samples available ^ψ
Aesthetic Physical Activities	Delivered by PE teacher Dance ^{o*} and Gymnastics ^{o*}	At least one six week unit (80 mins/ week) in each of the three years. Depending on student preference, may extend to a second unit in some years.	<ul style="list-style-type: none"> • Bodies can move in a range of creative ways, incorporating a variety of skills they already know. • Students can develop new skills in how to move their bodies, different to what might normally be associated with 'sport'. • Movements can be sequenced into routines to create a performance. • Dance and Gymnastics represent excellent ways to maintain healthy bodies through PA, and can be done individually, in pairs or in groups. • A range of health and performance related fitness components are critical to Dance and Gymnastics performance. • Improving students own abilities, and working well with others, are key parameters of success. 	Target 50% MVPA in lessons. Student choice critical in all streams to ensuring motivation, and especially so in this stream. Potential instructional models: Sport Education/Personal and Social Responsibility 12 x PE4Me HRA/FMS integration activity samples available ^ψ
Pathways to PA	Promoted by PE teacher, and across whole school. Schools develop links with as many community sports partners as they can, and facilitate a clear pathway for the partner to the school, and for the students to the community sports partner	Continuous. For each content area delivered in PE, links are made for the students to accessing the PA or sport in the local community	<ul style="list-style-type: none"> • It is essential that all students meet the intended MVPA targets, but there are a variety of ways to be active and achieve this. • For activities that students enjoy, follow the pathway information provided by the school to try the activity in the community. 	In Ireland, the 'Local Sports Partnership' coordinator (under Sport Ireland) for each locality is a key partner for schools, with much of the pathway information needed, and can help facilitate these links

(Continued)

Table A1. Continued.

Active Ingredient	Central components	Frequency and duration	Learning Focus	Additional detail
Whole School	All teachers, and members of the school community are key role models for students, and play a central role in fostering and supporting wellbeing and a physical activity promoting climate.	Continuous across the three years of Junior Cycle	<ul style="list-style-type: none"> Wellbeing is a whole school endeavour, and within this helping young people develop lifelong capacities for being physically active is also a whole school endeavour Develop teachers knowledge and understanding around the importance of PA for their own and their students health. Teachers collectively develop their schools charter for PA. Teachers learn that PA is important across all aspects of life, and support this in the school across the curriculum subjects. Teachers develop and maintain cross curricular links between PE and other subjects, and vice versa. Teachers employ active classroom breaks across all curriculum subjects. 	Teachers sign up to schools charter of strategies to individually, and collectively promote PA. Active role modelling encouraged. Teachers team building step challenges. Whole school teachers workshops lead by PE/wellbeing teachers. Y-PATH PE4Me support materials (presentation slides, charter poster, step challenge) available ^ψ
Parents and Guardians	Parents and guardians are acknowledged as central role models for their children, and key facilitators for developing and supporting PA and wellbeing at home and in the community.	Periodic. Information session at the start of the 1st year student experience, as part of school induction. Iterative contact through school newsletters, website, and social media feeds.	<ul style="list-style-type: none"> Develop the knowledge and understanding of parents/guardians around the importance of PA for their own and their children's health and wellbeing. Parents develop strategies for how to support PA participation at home and in the community. PA becomes a clear, central and continuous part of the messaging that parents/guardians receive from the school. 	Schools are encouraged to utilise the opportunities and bespoke strategies that may help to reach parents within their own context, acknowledging that it can often be difficult to reach parents/guardians. Y-PATH PE4Me support materials (presentation slides, sample newsletter content available) ^ψ

^θCore strand of the JCPE curriculum.^{*}Strand of the Junior Cycle PE Short Course.^ψResources available by attending Y-PATH PE4Me CPD, at no cost to the school or individual teacher.