



LEEDS
BECKETT
UNIVERSITY

Citation:

Cronin, L and Greenfield, R and Maher, A (2023) A Qualitative Investigation of Teachers' Experiences of Life Skills Development in Physical Education. *Qualitative Research in Sport, Exercise and Health*. pp. 1-16. ISSN 2159-676X DOI: <https://doi.org/10.1080/2159676x.2023.2222774>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/9726/>

Document Version:

Article (Accepted Version)

Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0

This is an Accepted Manuscript of an article published by Taylor & Francis in *Qualitative Research in Sport, Exercise and Health* on 13th June 2023. Available at: <https://doi.org/10.1080/2159676X.2023.2222774>

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.

A Qualitative Investigation of Teachers' Experiences of Life Skills Development in Physical Education

Lorcan Cronin^{a*}, Rebecca Greenfield^b and Anthony Maher^c

^aDepartment of Psychology, Mary Immaculate College, Limerick, Ireland; Department of Sport & Physical Activity, Edge Hill University, Ormskirk, United Kingdom; ^cCarnegie School of Education, Leeds Beckett University, Leeds, United Kingdom

*Correspondence concerning this article should be addressed to Lorcan Cronin, Department of Psychology, Mary Immaculate College, South Circular Road, Limerick, V94 VN26, Ireland. Email: Lorcan.Cronin@mic.ul.ie

A Qualitative Investigation of Teachers' Experiences of Life Skills Development in Physical Education

Recent studies have highlighted physical education (PE) as a setting for life skills development, yet little is known about how teachers can promote the development and transfer of life skills through PE. Therefore, the broad objectives of this study were to explore teacher's perceptions of what life skills are developed through PE, how these life skills are developed in practice, and whether these life skills transfer to other life domains. A qualitative methodological design consisting of in-depth semi-structured interviews was employed to obtain detailed insights from PE teachers. Audio-recorded interviews lasting an average of 43 minutes were conducted with 11 teachers ($M_{\text{age}} = 37.9$ years; teaching experience = 14.1 years) from the northwest of England. The interviews were transcribed verbatim and analysed thematically. Five key themes were constructed during data analysis: 1) key life skills developed through PE (e.g., teamwork, communication, leadership, & resilience), 2) why life skills are needed and taught, 3) considering students' individual needs when teaching life skills, 4) strategies for life skills development (e.g., explicit & implicit learning, teachable moments, & role modelling), and 5) the transferability of life skills to other domains (e.g., schoolwork & home life). The findings provide key insights into how teachers value life skills, support their development, and enable transfer to other areas of students' lives.

Keywords: personal and social skills; psychosocial skills; transferable skills; PE teaching

Introduction

Life skills are defined as skills that individuals develop in one context such as sport or school and then transfer to other contexts such as the home, the community, or the workplace (Williams et al., 2020). Examples of life skills include social skills, interpersonal communication, leadership, problem solving, teamwork, and time management (Cronin et al., 2020). Several researchers have highlighted the importance of such life skills as they have a positive effect on young people's health, education, family life, and employment prospects (Artess et al., 2017; Steptoe & Wardle, 2017). As such, it is important that young people develop these life skills before adulthood.

Several reviews articles have highlighted the potential for sport to teach young people life skills (e.g., Johnston et al., 2013; Holt et al., 2017; Williams et al., 2020). To begin with, sport is a popular activity that engages young people, and therefore they are primed to learn in this environment (Gould & Carson, 2010; Hansen & Larson, 2007). Moreover, the social, emotional, and interactive nature of sport are likely to provide developmental opportunities for young people (Danish et al., 2004; Fraser et al., 2005; Hellison et al., 2008). Indeed, critical incidents that take place within sport, such as competitive outcomes, athletes being given responsibilities, team conflict, emotional regulation events, are thought to facilitate life skills development (Gould et al., 2021).

A similar setting where young people are thought to develop their life skills is through PE. In this regard, both educational organisations and researchers have highlighted the importance of PE for young people's development (United Kingdom Department of Education, 2013; Opstoel et al., 2019). Research on several models of PE teaching (e.g., the Sport Education model, Siedentop, 1994; Teaching Personal and Social Responsibility model, Hellison, 2011; and Cooperative Learning, Slavin, 1995) have highlighted that these forms of PE help young people to develop their problem solving, time management, decision

making, teamwork, communication, leadership, emotional, and social skills (Bessa et al., 2019; Dyson et al., 2004, 2021; Jacobs et al., 2022; Pozo et al., 2018; Smither & Zhu, 2011). Life skills interventions have also sought to explicitly develop certain life skills in students and been successful in teaching students goal setting, problem solving, and cooperation skills (Goudas & Giannoudis, 2008; Pesce et al., 2016). Regarding psychological theory, Cronin and colleagues (2018, 2019, 2020) have highlighted that key aspects of self-determination theory (Ryan & Deci, 2017) – namely autonomy supportive teaching and satisfaction of students' basic psychological needs for competence, autonomy and relatedness – are associated with student's development of the following life skills: interpersonal communication, leadership, problem solving and decision making, goal setting, teamwork, social skills, emotional skills, and time management. It is noteworthy that when compared to youth sport, less is known about how teachers can help develop students' life skills through PE (Jacobs et al., 2022). Nonetheless, given the crossover between youth sport and PE (i.e., they both involve sports participation and embodied learning), some information can be gleaned from the youth sport literature that may apply to developing students' life skills in PE.

Within the youth sport literature, Turnnidge et al. (2014) forwarded the idea of implicit versus explicit life skills development. Implicit life skills development is the idea that the environment, relationships, social norms, and modelling of other's behaviours in sport bring about life skills development in young people. In contrast, explicit life skills development is the proposition that different measures can be put in place to develop specific life skills in young people (e.g., opportunities to lead, groupwork, and discussions). Expanding upon this idea, Bean et al. (2018) developed an implicit/explicit continuum of life skills development and transfer which encompassed six levels. Levels one and two involved the implicit approach to life skills development which included: 1) structuring the sport

context, and 2) facilitating a positive climate. Levels three to six comprised of the explicit approach to life skills development which included: 3) discussing life skills, 4) practicing life skills, 5) discussing life skills transfer, and 6) practicing life skills transfer. This continuum provides researchers and practitioners with a framework for investigating and developing young peoples' life skills. Moreover, this continuum has some crossover with the Teaching Personal and Social Responsibility (Hellison, 2011) model which has key themes of forming positive relationships with children, embedding key skills in physical activities, empowering participants, incorporating self-reflection, and transferring one's learning. Both the continuum and model outlined above reinforce the notion that PE has the potential to develop student's life skills, yet further research is required to understand the processes involved.

An important part of Bean et al.'s (2018) continuum and other models of life skills development (e.g., Gould & Carson, 2008; Pierce et al., 2017) is the notion of life skills transfer. Life skill transfer involves the application of knowledge/skills learned in one setting to another setting to enhance learning (Gagne et al., 1993). According to Pierce et al. (2016), for a skill to be truly seen as a 'life' skill it must be transferable from the domain in which it was learnt. In this regard, Mossman et al. (2021) highlighted that life skills learned in sport are transferable to five key life areas: school/education, home/family life, social settings, the community, and employment. Educational and international organisations have highlighted the importance of transferable life skills on young people's health, well-being, and educational success (Artess et al., 2016; United Nations International Children's Emergency Fund, 2012). Therefore, the transfer of life skills learned in sport or PE is important as it allows young people to apply these skills in different settings to their benefit.

In terms of PE, little is known about whether the life skills that students develop in PE are transferred to other settings and how teachers can seek to facilitate such transfer (Wright et al., 2019). Similarly, detailed information is lacking on the approaches and strategies that

teachers use to develop students' life skills in PE (Jacobs et al., 2022). This contrasts with the youth sport literature which contains numerous studies, frameworks and models which help to explain how young people develop their life skills through sport (e.g., Bean et al., 2018; Gould & Carson, 2008; Pierce et al., 2017). Although much can be learnt from the youth sport literature, there are important differences between PE and youth sport which means that findings from youth sport may not generalise to PE. Firstly, most young people will take part in PE, whereas a smaller percentage of young people will take part in sport (Loprinzi et al., 2017). Secondly, the nature, purpose and value of PE and youth sport have notable differences, with the former having a much stronger educational focus than the latter. This is especially the case when students are taking PE as an exam subject and will be educated in topics such as anatomy, physiology, sport psychology, and biomechanics. Thirdly, PE teacher education is generally lengthier and more extensive than volunteer youth sport coach education. As such, the current study sought to shed light on teachers' experiences and views relating to life skills development in PE and life skills transfer. Such information would help both teachers and researchers to better understand how life skills can be developed in PE and possibly transferred to other life domains.

Materials and methods

Philosophical positioning

Philosophical alignment was essential for increasing the quality of our research (Tracy, 2010). Hence, an interpretivist ontology underpinned the research in that qualitative data were gathered to get a better sense of the socially constructed realities of PE teachers when it came to life skills development. We embraced the notion that there are multiple realities that are dynamic and in flux, and therefore subject to change over time and across space (Sparkes & Smith, 2009, 2013). Accordingly, we acknowledge that our participants may have shared or even very different views about life skills development because everyone

has their own ideologies, values and lived experiences, all of which can shape experiential interpretation and meaning construction. Similarly, we as researchers, hold a set of beliefs that inevitably spilled into the research process, which is, according to Creswell and Poth (2018), the axiological assumption that characterises qualitative research. This is indicative of the subjective epistemology that we ascribe to, thus making it essential that we explore our positionality.

Personal and professional positionalities

At the beginning of the research process, the first author was a 36-year-old male senior lecturer in sport and exercise psychology who had researched life skills development using quantitative research methods for over 8 years. The second author was a 20-year-old female undergraduate paid student intern that was completing her degree in sport and exercise psychology and played sport at an elite level. The last author was a 38-year-old professor in special educational needs, disability and inclusion who taught on a PE and school sport degree programme and was vastly experienced in qualitative research methods. It was felt that the differing backgrounds of the researchers, and the fact that none of the researchers were PE teachers, would add different perspectives to the interview process and subsequent data analyses.

Participants

In total, 11 PE teachers (4 females and 7 males) from seven schools in the northwest of England were recruited and interviewed. In terms of teacher education, five teachers had completed an undergraduate degree in PE, whereas six completed an undergraduate degree in sport (e.g., sport and exercise science, and sports studies) followed by a graduate teacher education programme (e.g., PGCE in secondary school PE). The teachers had a mean age of 37.9 years ($SD = 7.3$), had been teaching for an average of 14.1 years ($SD = 7.6$), and been at their current school for 11.8 years ($SD = 8.9$). At their current school, the teachers generally

taught a mix of core PE (i.e., compulsory PE), exam-based PE (i.e., GCSE or A-Level PE), and other exam-based sports courses (e.g., BTEC in sport).

Procedure

Before commencing the research, ethical approval was gained through the university research ethics committee of the first author. Before commencing data generation, each teacher provided their informed consent to take part in one audio-recorded individual qualitative interview. Given that all three authors interviewed participants, we met at regular intervals to construct and discuss the interview schedule, clarify any ambiguities with the interview questions, and help ensure a degree of consistency across interviews. Like some researchers suggest (e.g., Tracy, 2010), we felt that different interviewers ensured that a wide variety of viewpoints were obtained from the teachers. All interview questions were based on the life skills development through PE and sport research literature (e.g., Cronin et al., 2020; Holt et al., 2017; Opstoel et al., 2018; Pierce et al., 2017). The questions were open-ended to ensure that rich, thick descriptions of views and experiences were generated, which is a hallmark of quality in qualitative research (Tracy, 2010). The interview schedule (see supplementary materials) aligned with the following research objectives: 1) what teachers feel are the key life skills that their students need, 2) strategies that teachers use to help develop students' life skills, 3) how the demands of PE may help students to develop their life skills and whether this is an implicit or explicit process, and 4) whether life skills that students develop in PE are used within other settings and how life skills transfer may be facilitated. The length of the interview was determined by the extent to which teachers were able and willing to discuss the questions posed. On average, this meant that the interviews lasted 43 minutes (range = 30 to 51 minutes). Nine interviews were conducted in a quiet space at the school where the teachers worked, and two interviews were conducted in a research office at the lead author's university.

Data Analysis

Interviews were transcribed verbatim and resulted in 68,969 words of data (111 pages of single-spaced times new roman sized 12 font text). The lead author listened to the interview audio recordings and read the transcripts to check the accuracy of interpretation. NVivo software (QSR International Pty Ltd., 2018) was used to store, manage, and analyse all interview transcripts. Thematic analysis, which was inspired by the work of Braun and Clarke (2016), was used to generate patterns of meaning across the dataset pertaining to life skills development and transfer through PE. Stage one of data analysis involved the first author listening to the audio recordings and reading the interview transcripts until he felt intimately connected to PE teacher views and experiences. Next, labels were assigned to chunks of the interview text that conferred meaning relating to the views and experiences of participants relating to life skills development and transfer. Labels were descriptive (i.e., what was said), analytical (i.e., the significance and implications of what was said), and conceptual (i.e., how what was said related to life skill development and transfer). The first author then moved to construct candidate themes based on the meaningful essence that core codes clustered around. Once themes were established, the interview transcripts were harvested for chunks of text relating to those themes that may have been missed during the initial data analysis. During each stage of the data analysis, the last author acted as a critical friend (Sparkes & Smith, 2013). This involved open discussions about the codes and themes being developed, different viewpoints being shared, and critical feedback being provided. This supported the first author to reflexively engage with and critically consider his construction of knowledge, thus helping to increase the quality of the data analysis (Smith & McGannon, 2018).

Results

Five themes were constructed through thematic analysis: 1) key life skills developed through PE, 2) why life skills are needed or taught, 3) considering student's individual needs when teaching life skills, 4) strategies for life skills development, and 5) the transfer of life skills to other domains. Each of these overarching themes and their accompanying sub-themes are discussed during this section. All quotes provided have been anonymised using pseudonyms.

Key life skills developed in PE

Across our interviews, 27 life skills were identified by teachers. The most frequently mentioned life skills were communication skills, resilience, teamwork, leadership, organisational skills, problem solving and decision making, confidence and self-esteem, social skills, sportspersonship, time management, goal setting, and empathy. In addition to the frequently mentioned life skills, there were less frequently mentioned life skills which included work ethic, manners and respect, personal responsibility, initiative, and the ability to handle pressure.

Why life skills are needed or taught

When outlining the life skills they thought were developed in PE, teachers often provided a rationale for why particular life skills were needed by their students. To begin with, teachers felt that students needed life skills for different areas of their lives such as education ('you start university, you're out of your social bubble and you're going to need to make friends, you're going to need to communicate with people your living with, you're going to be part of a team if you're in halls' – Richard), employment ('you're going to need confidence if you want to succeed in employment' – David), personal relationships ('they need those social skills to be able to speak to people... and meet new people' – Mike), or life in general ('no matter what they do in life, you are going to have to work in a team' – Bill). Teacher's own beliefs often accounted for why they felt the need to teach certain life skills.

For instance, Linda suggested that including life skills in PE would raise the value of the subject:

So, I think we sort of felt that we were realising that PE may have become an undervalued subject and people may start to say what's the point in PE. So, we kind of raised the profile of our own subject, saying actually... we do teach all these life skills in our subject and therefore tried to make it more explicit and make other people more aware.

Linda, and other teachers, also mentioned that the inclusion of life skills in PE allowed them to cater for non-sporty students:

To try and make the students who aren't as sporty to realise that it's not necessarily how good I am at hockey. Actually, if I'm becoming you know a better organiser, a better communicator, then that can help me.

Interestingly, the changing nature of today's students was highlighted by two teachers as a reason for teaching life skills. Expanding on this point, Richard felt this was a commonly held belief amongst his colleagues:

I would say there's some conversations in terms of possibly sometimes the students that are lacking in life skills now compared to some of the older members of staff, how it was miles better 10 or 15 years ago.

Other teachers such as Bill suggested that social media played a role in the deficit in students' communication skills:

In terms of communication, obviously a lot of kids now, they communicate online so they sometimes lack that face to face and how to communicate properly, you know eye contact, and you know sort of non-verbal communication stuff like that, that is generally lacking.

Considering students' individual needs when teaching life skills.

Of the teacher's interviewed, many of them expressed that they considered the student's current life skills when attempting to develop their life skills in PE. Chris explained this point by saying: 'from my experience, the idea of resilience is one that is evident in students that do have it and clear in students that don't' (Chris). Resilience was mentioned frequently by teachers and defined as the 'idea of not finding everything easy first time, but actually sticking at it' (Andrew), 'learning to bounce back from defeat' (Bill), or 'when they face challenges...it's about them trying to keep going and persevere' (Valerie). In terms of considering the student's current life skills Paul stated: 'it completely depends on the individual if I'm honest. They potentially could get them from elsewhere, which I'm sure they do. And others don't have these life skills, but they come to PE and they develop them'. A point made by several teachers was that they deal with a range of students with differing levels of life skills. For example, Jessica suggested that: 'some kids come with quite a lot of resilience and some kids come with absolutely nothing'. Other teachers considered individual factors beyond the gym or classroom when teaching life skills. For instance, Bill highlighted that a student's home life or socioeconomic status might influence their life skills.

Some parts of [town] do suffer with severe coastal town deprivation and no work, so we can tell the boys just from a conversation generally that lack the resilience, that lack the leadership and communication skills... the boys that maybe suffer financially or the parents are maybe disengaged with the [schooling] process maybe through their bad experiences or whatever. And they don't have those skills such as the empathy, the emotional intelligence sort of stuff.

Going further, Valerie highlighted how such issues affect her approach to teaching certain life skills.

Just bearing in mind what they might have been through at home. There might be a reason why they are really shy and don't want to get up in front of the rest of the class and lead.

Most teachers recognised that students have specific needs that may impact upon the teaching of life skills. For several of the teachers interviewed, this included considering the student's age. For example, Chris broadly highlighted the needs of students of differing ages:

Yeah, I think it varies from key stage, so year 7, 8, 9 into 10 and 11, I just think the year 7's, the focus is on cooperation, on empathy, respect. So more associated with the people around them, because they'll usually be more enthusiastic at that point and therefore the year 9's and 10's it's more about resilience and determination.

Likewise, Mike stated that: 'responsibility is certainly one in the lower years that we try and instil. That it's not their mum and dad's responsibility to ensure they've got their PE kit, it's up to them'.

Bill also identified specific learning needs as a factor for teachers to consider:

You are fully aware of boys in your class that have got certain learning needs or premium pupils that, that we may wish to develop different ones than other boys in the class. So, on our registers the boy's needs are quite clearly highlighted to us and then we can plan appropriate activities for those pupils as well as the pupils with no additional needs.

Strategies for life skills development.

Implicit & explicit learning

To begin with, most teachers believed that life skills development occurs both implicitly and explicitly within PE. Comments such as 'I think it's a bit of both' (Bill) and

‘well it’s both isn’t it’ (Andrew) illustrated this. Chris raised the interesting point that whether a life skill is developed implicitly or explicitly might depend on the life skill: ‘certain life skills have focus on the implicit of how they are learned, but some definitely need to be explicitly explained’. David explained how certain sports might implicitly develop certain life skills: ‘so yeah, social skills and communication. Again that’s, that’s just going to happen, I don’t think you teach that. In particular, with your team games that’s just going to happen’. Bill indicated that at times they teach some life skills explicitly: ‘we teach leadership here as one of our, one of our lessons if you like... so that’s more explicit’. In other instances, teachers such as Linda indicated that the type of sport or activity might lend itself for explicitly covering a particular life skill: ‘so, we have tried for example when we’re on athletics, we need to try and emphasise resilience when we are doing the 800m’. For other teachers such as Mike, there was a desire to make life skills development more explicit: ‘what we’re trying to do, is especially for me in PE, try and make it a little bit more explicit in our subject, in our lessons’.

Life skills opportunities

One thing stressed by all teachers was the need to give students opportunities to develop life skills. For instance, Jessica highlighted how they provided goal setting opportunities for students: ‘setting goals in like games, when we are using skills to improve their accuracy or the success rate of different things’. Other teachers such as Andrew highlighted how they create leadership opportunities for students by linking with local primary schools:

We’re also linked with the sports development team, so we constantly provide leaders to go and referee primary tournaments, organise internal coaching sessions and go back into their old primary schools to help with their sport days, so we create a large amount of leadership opportunities for our students.

At other times, smaller scale opportunities such as leading a warm-up or setting up equipment were mentioned by teachers to develop student's life skills. Valerie nicely explained the importance of these opportunities through the following quote:

It's just that giving them chance to be independent. There were certain times I'll be like right, this is what I want you to set up, there is your equipment, go away and do it. You know, so they're doing more things themselves, so that independence and that ability to use their own initiative.

Practical teaching strategies

Teachers highlighted a range of practical teaching strategies that are used to develop life skills. According to Chris, one practical strategy teachers use to develop student's life skills is through conversations: 'The idea of resilience, but again from a side, a conversation usually with a student at the side about why, you know...this is why you're doing it, this is what you're getting from it'. Valerie suggested that this could be expanded to a group conversation to develop other life skills:

Particularly if you're seeing occasions where teamwork isn't great. You might address it, you know, so why's it not working? And usually 9 times out of 10 they will say it's because we are bickering or because we are not working together. So, what do you need to do to improve and just having those conversations with them.

Groupwork was a common strategy used by most teachers to develop life skills: 'In terms of communication and that, we do put an emphasis on kids working in small groups' (Andrew). Andrew further discussed the crossover between life skills by explaining how groupwork can help develop leadership skills:

They are doing a group project together some, a leader who's nominated leader of that group can then sort of designate roles to individuals, so they will lead on data collection. Some boys will lead on the presentation, some boys will work on the

presentation who work digitally, so it's allocating different roles within the lesson that's worked quite well.

Scenario-based learning was another approach teachers used to develop life skills. For instance, Linda suggested that:

We try and create scenarios where the students have got a set piece of equipment and they've got to try and work as a team to create a game and therefore they are using some of their communication skills, working within a group, listening to each other's ideas and then they have to deliver those ideas to the rest.

Role modelling was an interesting strategy emphasised by teachers to develop their student's life skills. For example, David said: 'Teamwork, work ethic, again I think if you're modelling that yourself as a teacher it's going to follow'. Other teachers such as Bill mentioned the importance of peer role models and selecting role models carefully:

It's not always about the, the boys who are the confident leaders anyway, we try and pick a wide range of kids, some obviously who can be role models and aspirations to others in the programme, but ones who are quite quiet and withdrawn or quite reserved and we look to develop them as sports leaders...we wouldn't always pick the same lads, as you've got the best rugby player in the class, all the kids know who the best football player in the class, and so you pick somebody else who is demonstrating a certain thing and then that would boost their self-esteem....If you pick your role models carefully and cleverly then you can have that effect on the whole class.

Interestingly, some teachers mentioned how life skills could be developed through punishments or rewards. The punishment approach was illustrated by David with the following quote: 'time management, they get a detention if they are late to lessons'. In contrast, Tanya explained the idea of using rewards:

We try to reward, like give out PE rewards not just for the kids that are the best...give them for those other skills like I don't know the person who's tried their hardest, so like the things we look at are our core values within school and kids that have shown resilience.

Lastly, some teachers mentioned how students are being assessed for life skills development in PE. For example, Richard mentioned that:

As we are going round, we're grading them 1-4 basically on their leadership skills. Erm we also look at character in competition so sportsmanship, are you a good loser, are you a good winner, you know do you rub it in people's faces. So, every time we do a competition situation, we'll be observing that.

Teachers such as Valerie mentioned how they themselves might get assessed on how they teach life skills: 'so if I'm getting observed on the lesson plan observation sheet, they've got those boxes, like is there evidence of this you know this encouragement of growth mindset'.

Other teachers such as Tanya mentioned that peer assessment was included in their PE lessons:

Peer assessment of stuff and they have to watch each other, coach each other as they have to, as part of the older ones they that are doing the BTEC, they have to demonstrate coaching, they have to demonstrate leadership.

Teachable moments

Several teachers mentioned how positive and negative teachable moments can provide an opportunity to develop life skills. An example of a positive teachable moment was provided by Linda:

I think empathy is one of those things that comes up when a scenario happens. So, for example, there's a weaker member of the class and somebody does something

really nice and helps them, then it's sort of a quiet word where it's like that was really nice, you showed some really nice empathy there.

In contrast, according to Tanya, negative events in lessons can provide teachable moments:

We're doing cricket the other day and some kept batting behind them where there was nobody and this lad is just shouting at his teammates saying you're rubbish...in this situation, no you don't need to tell them they are rubbish, what you actually need to tell them is to work as a team and think of what's best for your team.

Planning

Several teachers mentioned how they include life skills in their lessons plans and schemes of work. For example, Tanya said:

Last year we did a whole unit of work on problem solving, teamwork and life skills as a 6-week block. Erm and in that they had to develop as organisers, so they took the role of equipment monitor or whatever, they had to be captain so leader, then they had referees so they obviously had to be an official and responsibilities and things like that. Then you had team manager so more the organisation and then we obviously got them to then try and apply those to different sports.

Similarly, Andrew explained how they have a scheme of work on leadership:

We teach leadership skills through football. So, the kids learn how to through the different roles in terms of referee, linesman, tournament organiser. We sort of organise tournaments and then they start organising their own. So, that's like a scheme of work that's to teach basic leadership skills through sport.

Several teachers mentioned how they incorporated programmes or models-based practice into their planning when seeking to develop their students' life skills. For example, Richard mentioned:

So, year 8, year 9, we'll do a Sports Ed model. So, when pupils come in, we give them responsibility... We will basically put them into teams, say right this is the sport we are doing, lets go out and do a warm-up and you might assign this time a captain who has to give roles out. So, it's kind of teamwork and leadership.

Likewise, Mike stated:

'we have another thing called PE for Life. So, we kind of have codes, so physical me, social me, thinking me, and personal me. And for the different strands we will identify just 2 per lesson. So, it could be like C1 is communication and C1 is teamwork.

Teaching behaviours

Several teaching behaviours were mentioned as being helpful for developing life skills. One such behaviour used by David was questioning students:

And problem solving ...okay guys how's this drill going... how can we get 10 passes if it's 10 passes to score a goal or something, in a possession game or something. Okay if we're struggling why is that? How can we overcome that?

Several teachers such as Richard also mentioned how they'll use the whiteboard to highlight the life skills being worked on in lessons: 'Instead of going onto the whiteboard and writing we are doing basketball, it would be we are doing teamwork today or we are doing community today or we are doing resilience today'.

The transferability of life skills to other domains.

Transfer areas

The teachers interviewed highlighted that the life skills developed in PE were transferrable to the following life domains: employment, schoolwork, social situations, personal life, relationships, and family life. The importance of certain life skills or a broad range of life skills was particularly highlighted in relation to gaining employment. For instance, Paul expressed the view that their most successful alumni possessed a range of different life skills: ‘what’s funny about it is you look at all these life skills, I would say all those children who have come through here and been successful, they probably had every single one of those’. Other teachers such as Andrew made direct links between a life skill learnt through PE and future employment: ‘They’ve actually got careers out of it. There’s at least 4 of them that are working for super league now from doing our scheme of works with leadership’. Schoolwork was another key area where teachers believed their students utilised life skills developed in PE: ‘Teamwork again could be in school, so working in PE could be working as a team, but it could be, it could be in any other subject you know’ (Mike). Mike also expressed the interesting idea that life skills were transferrable to multiple life domains: ‘communication skills, it’s everywhere isn’t it, in school, at work, after school with friends, in the house at home, you know you need communication skills for anything really’.

Different views on transfer

Interestingly, teachers put forth different views on whether life skills transfer occurs. For teachers like Chris, they felt certain that life skills do transfer: ‘I would hope so is the answer, because they are obviously, they’re called life skills for a reason, they’re not PE skills’. Following on from such a point, Andrew felt that students naturally transfer certain life skills: ‘I think a lot of them do transfer naturally like manners and social skills’. For other teachers like Linda, they were uncertain if life skills are transferred to other areas and expressed the view that it might depend on the student:

I think kids probably don't think outside what the here and now is, they don't see the bigger picture on the whole. Like I said, there probably is some brighter kids that will, but on the whole I don't think they'll see teamwork in football as being a transferred skill in another area.

Aiding transfer

Some of the teachers explained that talking about transfer and helping students make the links between life domains were the main ways they tried to aid transfer. For instance, Richard explained that they provide a rationale for learning a particular life skill, which included when the student will use the skill:

Occasionally in a lesson, if I was doing a talk about a life skill, I will try and give it some purpose about when it's going to be useful or when it's you're going to use it... we're doing resilience, so later in life you're going to be rejected, you're going to not win all the time, this is why we do it.

In practical terms, Tanya spoke about providing students with concrete opportunities to transfer life skills learned in PE:

Because we have a primary school as well, the kids have to organise, plan and deliver a session to lead primary school children without our help. So yeah, we are quite like lucky as we get to see it, you know what I mean, they've learned that skill and we get to see it there.

Key barriers to life skills development.

During the interviews, teachers expressed that there were barriers in place that prevented life skills development. The three main barriers cited were time, an exam focus, and the curriculum. In terms of time, many teachers such as Bill identified a lack of time as preventing them from planning life skills into their lessons: 'sometimes don't have time for a drink never mind time to plan opportunities to develop adaptability or emotional intelligence

within your lessons'. Additionally, some teachers like Linda emphasised that a limited amount of time with their students prevented life skills from being a focus of lessons:

if you, for example, have a lesson with year 8 today and they played hockey and it was their first time of hockey. So, I was really keen on getting them through a recap of their skills and into a game ... and possibly I didn't focus, maybe not explicitly on any life skills.

Several teachers such as David also mentioned how exam results are often the focus of PE in schools:

in core PE no one is going to be asking you why hasn't their confidence improved in this, why has their social skills not improved by the end of this, but they will be asking you how come they are only a level 6 when their target is a level 7.

Lastly, Andrew highlighted how some life skills have been removed from the national curriculum:

the only problem is that leadership got taken out of GCSE PE about 3 years ago and it used to be a practical option for kids, that came out, but it didn't mean we lost the leadership element of our curriculum because we thought it was really important.

Discussion

The overall aim of the study was to explore whether PE can develop life skills in students that may be transferred to other life domains. To begin with, findings from this study highlighted that teachers believed their students develop a wide range of life skills through PE. The youth sport and PE literature has identified a variety of life skills developed through sport and PE, which, like our study, includes a core set of frequently cited life skills (e.g., Johnston et al., 2013; Opstoel et al., 2020). In practice, our findings suggests that PE could be

further utilised as a subject which develops a range of important life skills in students. In this regard, future life skills interventions may focus on some of the frequently mentioned life skills from our study or work with PE teachers and schools to decide which life skills they feel it is important for their students to develop.

In addition to highlighting the life skills developed in PE, teachers in our study provided a rationale for why their students may need to develop life skills. This included the applicability of life skills for other areas of students' lives, such as education, employment, personal relationships, and life in general. Interestingly, some teachers highlighted the need to raise the profile of PE as a rationale for why they seek to develop student's life skills. This fits with the belief that PE struggles to gain status in a crowded curriculum and therefore the broader learning within PE may further highlight the importance of the subject (Lambert et al., 2022). Other teachers felt that including life skills allowed them to provide greater equity in PE by catering for non-sporty students, who may not be as physically or technically competent in developing their sport-specific skills. Overall, the fact that teachers believed life skills were important for a wide variety of reasons indicates that they would be open to future intervention efforts or changes to teacher training that focus on developing students' life skills via PE.

Teachers interviewed in our study seemed to also have an appreciation for how they can develop students' life skills. To begin with, teachers indicated that they considered student's individual needs when teaching life skills. Often, this involved the student's present life skills (or lack of life skills), specific learning needs, and other factors such as age, socioeconomic status, and home life. In this regard, it is important that teachers really get to know their students as individuals, so that they can best help them to develop their life skills in PE. Aligning with our findings, several of the models of life skills development through

sport (e.g., Gould & Carson, 2008; Pierce et al., 2017) have suggested that coaches need to consider the individual when seeking to develop their life skills.

Like the research in youth sport (e.g., Turnnidge et al., 2014), teachers in our study indicated that life skills could be developed through PE both implicitly (i.e., as a by-product of playing sports) and explicitly (i.e., teaching life skills in an intentional manner). Although this is no doubt true for some students, one would have to question whether students that do not particularly enjoy sports learn life skills as a by-product of playing sports in PE. A positive finding of our study was that teachers highlighted a wide range of practical strategies for life skills development. These included life skills opportunities (e.g., goal setting within lessons, leading a warm-up, organising a sports tournament), teaching strategies (e.g., conversations with students, groupwork, scenario-based learning, role modelling, punishments, rewards, and life skills assessments), teachable moments (e.g., using positive or negative events as learning opportunities), planning for life skills learning (e.g., lesson plans including life skills or incorporating model-based practices into one's teaching), and teaching behaviours (e.g., questioning students or using the whiteboard). Future intervention and teacher education programmes that seek to develop students' life skills through PE could incorporate the above strategies in practice, so that PE teachers have the knowledge, skills, experience, and confidence to develop the life skills of pupils in their charge.

Although some teachers mentioned the importance of planning life skills into one's lessons, assessing life skills development, and adopted strategies to make life skills development more explicit, it is important to acknowledge that some of the strategies highlighted above may leave life skills development somewhat to chance. As such, teachers ought to assess that life skills development is occurring by using measures such as the Life Skills Scale for Physical Education (Cronin et al., 2018). There is also scope to integrate what can be learnt from model-based practices (e.g., Teaching Personal and Social Responsibility,

Hellison, 2011) with the practical strategies and assessment methods outlined above to best develop students' life skills in PE. Moreover, in order to best develop their student's life skills, teachers should be encouraged to critically reflect on their lesson planning (e.g., did they adequately plan for life skills development and how well did their planning work in practice), content (e.g., did they adapt or build-in life skills into their lessons and why were particular life skills included), delivery (e.g., how exactly did they incorporate life skills within their lessons, what activities were utilised to teach certain life skills, and were such activities effective), and perceived outcomes (e.g., what did students and teachers feel was learnt during PE lessons and what was the extent of such learning).

In terms of the crossover between PE and youth sport, some of the strategies highlighted above were particularly unique to the PE context. Examples of such strategies include asking students to work with a piece of equipment to create a game, pairing up students to enable peer role modelling of leadership skills, the formal assessment of the teacher's ability to teach life skills, and the inclusion of life skills within lesson planning. On a related point, we believe that PE teachers and sports coaches could learn a great deal from each other in terms of developing young people's life skills. As such, future studies involving focus groups with both PE teachers and sports coaches may help bring about a more detailed understanding of what can be done to develop young people's life skills in both settings.

Some of the strategies for life skills development that teachers put forth when interviewed also aligned with some of the key developmental theories. For instance, self-determination theory (Ryan & Deci, 2017) concepts addressed by teachers included considering a student's life skills ability or lack of life skills (i.e., considering their competence), providing opportunities for independence and initiative by allowing students to organise a sports tournament (i.e., fostering their autonomy), and utilising group work (i.e., to promote relatedness). Teachers also sought to promote student's competence by utilising

teachable moments to praise positive behaviours (e.g., showing empathy) or stopping negative behaviours (e.g., criticising fellow students) which would undermine fellow students' competence. Bioecological systems theory (Bronfenbrenner, 1992) concepts such as the microsystem (e.g., the student's home life), mesosystem (i.e., the student's neighbourhood), and exosystem (i.e., the PE curriculum) were highlighted by the teachers when discussing life skills development. Lastly, self-efficacy theory (Bandura, 1997) concepts such as vicarious experiences (i.e., teacher and peer role modelling) and behaviourism (Skinner, 1938) concepts such as punishments (e.g., detention for lateness to promote time management) and rewards (i.e., awards for hard work) were utilised by some PE teachers. What is important to note is the fact that teachers did not explicitly mention any of these theories during the interviews. As such, future studies could further explore whether such theories and concepts were part of the teachers training or continuous professional development, and thus influenced their teaching practices, or whether they simply intuitively used such approaches. Moreover, using one or more of the theories outlined above, researchers could shed further light on the mechanisms by which young people develop their life skills in PE. For example, using self-efficacy theory (Bandura, 1997), researchers could look to better understand how concepts such as mastery experiences (e.g., past successes with goal setting), role modelling (e.g., watching a peer display leadership skills), verbal persuasion (e.g., encouragement from a teacher for displaying teamwork skills), and physiological states (e.g., feeling calm and in control of one's emotions during a competitive game) may enhance individual student's life skills development and transfer.

In addition to the practical strategies for life skills development, another positive finding from the present study pertains to the area of life skills transfer. Specifically, teachers in the present study indicated that life skills learned in PE were transferable to six key areas: employment, schoolwork, social situations, personal life, relationships, and family life. While

these areas of life skills transfer align with past youth sport research (e.g., Mossman et al., 2021), this is the first time they have been explored in PE. Interestingly, there were also mixed views on the occurrence of life skills transfer. Specifically, some teachers felt that students would transfer life skills naturally, whereas other teachers cast doubts on whether students would see the bigger picture in order to transfer life skills. In practical terms, teachers indicated that discussing the transferability of a life skill and providing the opportunities to transfer (e.g., by organising a sports event) were the two primary methods of aiding student's life skills transfer. Given that this is one of the first studies to explore life skills transfer with PE teachers, future studies are required to further explore this area.

Overall, the strategies for life skills development and transfer outlined by teachers in our study aligned with Bean et al.'s (2018) continuum of life skills development and transfer: 1) structuring the context, 2) facilitating a positive climate, 3) discussing life skills, 4) practicing life skills, 5) discussing transfer, and 6) practicing transfer. Levels 1-2 of this continuum involve an implicit approach, whereas levels 3-6 involve an explicit approach. As the higher levels of this continuum are thought to lead to greater life skills development and transfer, it was encouraging that teachers in our study were outlining strategies related to levels 3-6 of this continuum. Some of the practical strategies that aligned with these levels included: having conversations with students about life skills and their importance (level 3 – discussing life skills), intentionally creating opportunities for students to practice life skills in sport (level 4 – practicing life skills), talking about transfer and its importance with students (level 5 – discussing transfer), and forging links with primary schools to apply life skills in another context (level 6 – practicing transfer). Thus, it seems that Bean et al.'s (2018) continuum, and the practical strategies for life skills development and transfer outlined by PE teachers, could be used when seeking to educate teachers about life skills development in PE. Nonetheless, one important aspect of Bean et al.'s (2018) continuum that was not mentioned

by teachers was the idea of utilising reflective practice to enhance student's life skills development and transfer (i.e., getting students to reflect on the life skills they have learned in PE and transferred to other contexts). Such an approach could be explored in future studies and potentially utilised to best promote PE student's life skills development and transfer.

Limitations

The current study had some limitations that could be addressed within future research. To begin with, the study was limited by the fact that only teachers from the northwest of England were interviewed. As cultural factors may influence life skills development (Hayden et al., 2015) and there may be differences in PE across countries, future studies should explore life skills development and transfer amongst teachers from a range of countries. Additionally, given that our research gathered data from PE teachers only, future research should explore the perspectives of pupils given that they are the recipients of teachers' life skills development and transfer endeavours, and thus have expert knowledge in that regard because of their embodied experiences. Such future research is particularly important as past studies have shown that coaches and athletes can have differing views on what life skills are being taught through sport (Marsollier et al., 2020). Lastly, we acknowledge that not all teachers interviewed would have felt comfortable enough to share their experiences with an unfamiliar researcher in a one-on-one interview. As such, future research using ethnography or other field methods may help to explore life skills development and transfer through PE in more depth.

Conclusion

Overall, the findings from this study provide key insights into how teachers value life skills, support their development, and encourage life skills transfer to other areas of students' lives. To begin with, this study illustrated that teachers believe that students develop a range of life skills through PE. Adding to our understanding of life skills development in PE, our

findings suggest that teachers need to consider the individual student's needs and implement practical strategies for students to develop their life skills. Regarding life skills transfer, our findings highlighted that teachers believe that life skills are transferable to other aspects of student's lives and this transfer process could be facilitated by discussing and practicing life skills transfer. Building on our promising findings, future research should explore how PE as a subject can be utilised to optimally develop students' life skills.

References

- Artess, J., Mellors-Bourne, R., & Hooley, T. (2017). *Employability: A review of the literature 2012-2016*. Higher Education Academy. Available at https://derby.openrepository.com/bitstream/handle/10545/621285/dataset_for_employability_literature_review_2012_to_2016.pdf?sequence=8&isAllowed=y
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Macmillan.
- Bean, C., Kramers, S., Forneris, T., & Camiré, M. (2018). The implicit/explicit continuum of life skills development and transfer. *Quest*, 70(4), 456–470.
- Bessa, C., Hastie, P., Araújo, R., & Mesquita, I. (2019). What do we know about the development of personal and social skills within the sport education model: A systematic review. *Journal of Sports Science & Medicine*, 18(4), 812–829.
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. *Routledge handbook of qualitative research in sport and exercise*, 191–205. Oxon, UK: Routledge.
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187–249). London: Jessica Kingsley Publishers.
- Creswell, J., & Poth, C., (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). London, UK: Sage Publications.
- Cronin, L. D., Allen, J., Mulvenna, C., & Russell, P. (2018). An investigation of the relationships between the teaching climate, students' perceived life skills development and well-being within physical education. *Physical Education and Sport Pedagogy*, 23(2), 181–196.
- Cronin, L., Marchant, D., Allen, J., Mulvenna, C., Cullen, D., Williams, G., & Ellison, P. (2019). Students' perceptions of autonomy-supportive versus controlling teaching and

- basic need satisfaction versus frustration in relation to life skills development in PE. *Psychology of Sport and Exercise*, 44, 79–89.
- Cronin, L., Marchant, D., Johnson, L., Huntley, E., Kosteli, M. C., Varga, J., & Ellison, P. (2020). Life skills development in physical education: A self-determination theory-based investigation across the school term. *Psychology of Sport and Exercise*, 49, 101711.
- Danish, S., Forneris, T., Hodge, K., & Heke, I. (2004). Enhancing youth development through sport. *World Leisure Journal*, 46(3), 38–49.
- Dyson, B., Griffin, L. L., & Hastie, P. (2004). Sport education, tactical games, and cooperative learning: Theoretical and pedagogical considerations. *Quest*, 56(2), 226–240.
- Dyson, B., Howley, D., & Wright, P. M. (2021). A scoping review critically examining research connecting social and emotional learning with three model-based practices in physical education: Have we been doing this all along? *European Physical Education Review*, 27(1), 76–95.
- Fraser-Thomas, J. L., Côté, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, 10(1), 19–40.
- Gagne, E. D. (1993). *Cognitive psychology of school learning* (2nd ed.). New York: Harper Collins.
- Goudas, M., & Giannoudis, G. (2008). A team-sports-based life-skills program in a physical education context. *Learning and Instruction*, 18(6), 528–536.
- Gould, D., & Carson, S. (2008). Life skills development through sport: Current status and future directions. *International Review of Sport and Exercise Psychology*, 1(1), 58–78.

- Gould, D., & Carson, S. (2010). The relationship between perceived coaching behaviours and developmental benefits of high school sports participation. *Hellenic Journal of Psychology*, 7, 298–314.
- Gould, D., Martin, E. M., & Walker, L. F. (2021). A season long investigation of social emotional learning associated with high school basketball participation. *Journal of Applied Sport Psychology*, 1-23.
- Hansen, D. M., & Larson, R. W. (2007). Amplifiers of developmental and negative experiences in organized activities: Dosage, motivation, lead roles, and adult-youth ratios. *Journal of Applied Developmental Psychology*, 28, 360–374.
- Hayden, L. A., Whitley, M. A., Cook, A. L., Dumais, A., Silva, M., & Scherer, A. (2015). An exploration of life skill development through sport in three international high schools. *Qualitative Research in Sport, Exercise and Health*, 7(5), 759–775.
- Hellison, D. (2011). *Teaching personal and social responsibility through physical education* (3rd ed.). Champaign, IL: Human Kinetics.
- Hellison, D., Martinek, T., & Walsh, D. (2007). Sport and responsible leadership among youth. In *Positive youth development through sport* (pp. 63–74). Oxon, UK: Routledge.
- Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., ... & Tamminen, K. A. (2017). A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology*, 10(1), 1–49.
- Jacobs, J. M., Wright, P. M., & Richards, A. R. (2022). Students' perceptions of learning life skills through the Teaching Personal and Social Responsibility model: An exploratory study. *Frontiers in Sport and Active Living*, 4, 1–11.

- Johnston, J., Harwood, C., & Minniti, A. M. (2013). Positive youth development in swimming: Clarification and consensus of key psychosocial assets. *Journal of Applied Sport Psychology, 25*(4), 392–411.
- Lambert, K., Ford, A., & Jeanes, R. (2022). The association between physical education and academic achievement in other curriculum learning areas: A review of literature. *Physical Education and Sport Pedagogy, 1*–31.
- Loprinzi, P. D., Cardinal, B. J., Cardinal, M. K., & Corbin, C. B. (2018). Physical education and sport: Does participation relate to physical activity patterns, observed fitness, and personal attitudes and beliefs? *American Journal of Health Promotion, 32*(3), 613–620.
- Marsollier, É., Trottier, C., & Falcão, W. R. (2020). Development and transfer of life skills in figure skating: experiences of athletes and their coaches. *Qualitative Research in Sport, Exercise and Health, 12*(5), 664–682.
- Mossman, G. J., Robertson, C., Williamson, B., & Cronin, L. (2021). Development and initial validation of the Life Skills Scale for Sport–Transfer Scale (LSSS-TS). *Psychology of Sport and Exercise, 54*, 101906.
- Opstoel, K., Chapelle, L., Prins, F. J., De Meester, A., Haerens, L., van Tartwijk, J., & De Martelaer, K. (2020). Personal and social development in physical education and sports: A review study. *European Physical Education Review, 1*–17.
- Pesce, C., Marchetti, R., Forte, R., Crova, C., Scatigna, M., Goudas, M., & Danish, S. J. (2016). Youth life skills training: Exploring outcomes and mediating mechanisms of a group-randomized trial in physical education. *Sport, Exercise, and Performance Psychology, 5*(3), 232–246.
- Pierce, S., Gould, D., & Camiré, M. (2017). Definition and model of life skills transfer. *International Review of Sport and Exercise Psychology, 10*(1), 186–211.

- Pierce, S., Gould, D., Cowburn, I., & Driska, A. (2016). Understanding the process of psychological development in youth athletes attending an intensive wrestling camp. *Qualitative Research in Sport, Exercise and Health*, 8(4), 332–351.
- Pozo, P., Grao-Cruces, A., & Pérez-Ordás, R. (2018). Teaching personal and social responsibility model-based programmes in physical education: A systematic review. *European Physical Education Review*, 24(1), 56–75.
- QSR International Pty Ltd. (2018). *NVivo* (Version 12). Available at:
<https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford Publications.
- Siedentop, D. (1994). *Sport education*. Champaign, IL: Human Kinetics.
- Skinner, B. F. (1938). *The Behavior of organisms: An experimental analysis*. New York: Appleton-Century.
- Slavin, R. E. (1995). *Cooperative learning* (2nd ed.). Needham Heights, MA: Allyn and Bacon.
- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, 11(1), 101–121.
- Smither, K., & Zhu, X. (2011). High school students' experiences in a Sport Education unit: The importance of team autonomy and problem-solving opportunities. *European Physical Education Review*, 17(2), 203–217.
- Sparkes, A. C., & Smith, B. (2009). Judging the quality of qualitative inquiry: Criteriology and relativism in action. *Psychology of Sport and Exercise*, 10(5), 491–497.
- Sparkes, A. C., & Smith, B. (2013). *Qualitative research methods in sport, exercise and health: From process to product*. Oxon, UK: Routledge.

- Steptoe, A., & Wardle, J. (2017). Life skills, wealth, health, and wellbeing in later life. *Proceedings of the National Academy of Sciences, 114*(17), 4354–4359.
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851.
- Turnnidge, J., Côté, J., & Hancock, D. J. (2014). Positive youth development from sport to life: Explicit or implicit transfer? *Quest, 66*(2), 203–217.
- United Kingdom Department of Education. (2013). *National curriculum in England: Physical education programmes of study*. Retrieved from:
<https://www.gov.uk/government/publications/national-curriculum-in-england-physical-education-programmes-of-study/national-curriculum-in-england-physical-education-programmes-of-study>
- United Nations International Children’s Emergency Fund. (2012). *Global evaluation of life skills education programmes: Final report*. Retrieved from:
https://www.unicef.org/evaldatabase/files/UNICEF_GLS_Web.pdf
- Williams, C., Neil, R., Copley, B., Woodman, T., & Roberts, R. (2020). A systematic review of sport-based life skills programs for young people: The quality of design and evaluation methods. *Journal of Applied Sport Psychology, 1–27*.
- Wright, P. M., R. Richards, K. A. R., Jacobs, J., & Hemphill, M. A. (2019). Measuring perceived transfer of responsibility learning from physical education: Initial validation of the transfer of responsibility questionnaire. *Journal of Teaching in Physical Education, 38*(4), 316–327.

Supplementary Materials

Interview Schedule			
General Demographic/Background Questions			
<ol style="list-style-type: none"> 1. How long have you been a PE teacher? 2. What was your route into PE teaching? 3. What did your PE teacher training entail? 4. How long have you been teaching at your current school? 5. Can I ask what age you are? 6. What sports kids do in PE? 7. How many hours per week do kids do PE in the school? 			
Research Question	Orienting Statement	Example Questions	Example Prompts
1. Explore what teachers feel are the key life skills that students need.	I would now like to talk about the life skills that students may require. When I talk about life skills, I am talking about the skills that people require to deal with the demands and challenges of everyday life.	<p>Are there any life skills that you feel your students require?</p> <p>Can you explain why you believe that students require each of those particular life skills?</p> <p>Do you feel that the life skills requirements differ between the students you teach?</p>	<p>Encourage teachers to provide further details on the answers they give.</p> <p>Ask teachers if there are any other life skills that they can think of their students may require.</p> <p>Question them of why particular life skills might be important for their students.</p> <p>Further Prompts: Can you explain that a bit further? What do you mean by that? What are the implications of that?</p>
2. Explore any strategies that teachers use to help develop students' life skills.	You have been teaching PE for a number of years and probably have your own thoughts and ideas on how the PE environment could be tailored to promote students' development. I now want to hear your own ideas and strategies that could be used within PE to promote the life skills that we have been discussing.	<p>What sort of opportunities, activities or strategies do you use or feel could help students develop particular life skills?</p> <p>Are there any strategies that could be used to promote [insert particular skill mentioned to above questions] skills with your students?</p> <p>Can you explain any experiences or personal attributes that have influenced your current views on life skills development with your students?</p> <p>Can you give me some examples of situations that occur during PE that can be used to develop certain life skills?</p> <p>What constrains your ability to develop life skills in your students?</p>	<p>Think about what could be done during PE classes to develop these life skills in students.</p> <p>Can you think of any activities before PE that could be used to develop any of the life skills in students?</p> <p>Can you think of any activities after PE that could be used to develop any of the life skills in students?</p> <p>What might be done during the school year to help students to develop these life skills?</p> <p>What could teachers do to help students develop these life skills?</p> <p>Is there anything that students themselves could do to ensure that their fellow students develop these life skills?</p> <p>What might the school do to develop these life skills in its students?</p> <p>What influences your perceptions of life skills development with your students?</p> <p>Why are these particular skills not developed? How might these life skills be developed within PE students?</p> <p>Do you feel your training, the curriculum, priorities or culture of the school, or even school or governmental</p>

		Do any of your personal characteristics as a PE teacher relate to the development of some of the life skills that you mentioned earlier?	policies influence your approach to developing life skills in your students?
3. Explore how the demands of PE may help students to develop their life skills and whether this is an implicit or explicit process.	We are now going to discuss how PE might facilitate life skills development in students. In this regard, we are going to cover whether this is an implicit process (the PE activities brings about life skills development) or an explicit process (you actively try to teach the student's life skills).	Can you explain how you feel students may develop certain life skills through PE? Can you explain whether you feel students develop their life skills through the activities they are taking part in within PE or through the efforts of the teacher to teach specific life skills ? Can you provide any examples of activities that help students to develop certain life skills?	Maybe we can re-look at the life skills you mentioned earlier and explore how students may develop each life skill within PE.
4. Explore whether life skills that students develop within PE are used within other settings. Also, explore how the transfer of life skills may be facilitated.	An important feature of a life skill is that the person uses the skill in various areas of their life. We will now discuss whether some of the life skills you mentioned earlier can be utilised in other aspects of a student's life.	Can you explain how each of the life skills mentioned earlier may transfer to other aspects of a student's life? Do you believe that this transfer happens naturally , or does the transferring of the skill need to be encouraged ? Can you give any examples of how you might help students to transfer the life skills they've learned within PE to other settings? Are there any life skills that you believe don't transfer to contexts outside of school?	Prompting them in relation to the life skills that they mentioned earlier and the one's that we highlighted. Why do you believe that particular life skill transfers to other contexts?