

Figuring out the prevalence of fitness testing in physical education: A figurational analysis

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Abstract

This paper explores the ways in which figurational sociology can offer a useful lens through which to understand the ongoing use of fitness testing as a means to physically educate young people. We contribute to a theoretical discussion around how physical education teachers have come to think about and enact fitness testing so pervasively. Applying a figurational lens: (a) encourages us to view fitness testing as a historically rooted practice; (b) sensitises us to the importance of social interdependencies and habitus when trying to understand their prevalence; (c) helps us to go beyond the labelling of fitness testing as 'disciplinary' and encourages us to identify the (un)intended consequences of fitness testing, and how these are enabling and constraining and for whom. Using a figurational lens we identify scientisation and shaming as two social processes that can help us understand why physical educators use fitness testing as a context for learning despite a lack of evidence to suggest its worth. The theorising articulated in this paper, together with the sociological work it follows, can help us move forward in terms of pedagogical possibilities for physical education.

Keywords

Physical education, teachers, fitness testing, figurational sociology, Elias

Introduction

This paper explores the ways in which figurational sociology can offer a useful lens through which to understand the ongoing use of fitness testing as a means to physically educate young people. We contribute to a theoretical discussion around how physical education teachers have come to think about and enact fitness testing so pervasively. Building on existing research (for example Alfrey

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and Gard, 2014; Cale et al., 2014; Hopple and Graham, 1995) this paper theorises the ubiquitous and largely unquestioned use of fitness testing as a privileged 'educational' practice within physical education in countries such as England, Wales, Australia and the USA. More specifically, it explores some of the ways in which figurational sociology, developed largely by Norbert Elias, can help to explain why fitness testing is privileged despite a lack of curriculum imperatives or evidence to support its educational value.

Fitness testing as physical education

In his work on 'Death of humane medicine and the rise of coercive healthism', Skrabanek (1994) discusses 'lifestyle surveillance' as being central to the medical metier. Drawing upon Foucault (1977), he positioned testing or 'examination' as an essential means of controlling and classifying 'normals' 'abnormals' or 'deviants'. He contested that "there is no evidence to show that mass health screening of healthy people decreases their risk of adverse outcomes", though there is now "extensive evidence" that 'abnormal' test results have resulted in discrimination (Skrabanek, 1994, p.162). In the context of Physical Education, fitness testing – including the multi-stage fitness (beep) test, running-based anaerobic sprint test, one rep max test and the vertical jump test – is accompanied by both intended and unintended consequences. Although there is some evidence that a high proportion of physical education teachers use fitness tests in their programmes (Cale et al., 2014; Harris and Cale, 2006), little is known about intended consequences of this practice. Keating and Silverman's (2004) quantitative survey of 325 North American physical education teachers found that they gave three main reasons for using fitness testing with their students: (1) promoting physical activity and health; (2) recording students' improvements; and (3) assessing and/or improving teachers' physical activity and fitness instruction. More recently, Alfrey and Gard's (2014) qualitative research with physical education teachers from the Australian state of Victoria explored their perspectives on fitness testing. Similar to Green's (2003) work on physical education teachers' philosophies, Alfrey and Gard (2014) found that teachers held somewhat contradictory positions on fitness testing. Viewed on a continuum, teachers ranged from being wholeheartedly in favour of fitness testing to being highly sceptical of its value, while some appeared to shift their position over the course of interviews. Whilst this ambiguity might seem troubling, Alfrey and Gard (2014) were more inclined to see it as an encouraging possibility: a sign that some teachers were open to alternative perspectives and critical reflection. They concluded that there appeared to be limited opportunity for physical education teachers to engage in open and supportive professional dialogue that might validate the concerns they had about fitness testing and, importantly, generate alternative means for teaching about health-related physical fitness in physical education.

Whilst arguments exist for using fitness testing as a context for learning in physical education (Keating & Silverman, 2004; Keating 2003), a number of scholars have flagged some unintended consequences associated with pedagogical practices, like fitness testing, that are heavily individualistic and performative (Cale and Harris, 2009; Cale et al., 2014; Garrett and Wrench, 2008; Sykes and McPhail, 2008; Zanker and Gard, 2008). While some young people may enjoy fitness tests, research suggests that they can induce shame and embarrassment (Van Daalan, 2005) and have negative consequences for students' identity, education and health (Evans et al., 2008; Garret and Wrench, 2008; Sykes and McPhail, 2008). As Cale and Harris (2009) highlight, the role fitness testing plays in promoting physical education and activity is questionable. They stated that there was little evidence to suggest that fitness tests promote healthy lifestyles and physical activity, motivate young people, and develop the knowledge and skills that are important to the sustained

engagement in an active lifestyle. The findings of Cale and Harris (2009) support those of Hopple and Graham (1995), who carried out one of the few empirical studies of students' attitudes towards fitness testing, suggesting that students themselves are often unclear about what they actually learn from the process. Cale et al. (2014) extended the fund of knowledge around fitness testing in schools, and their work with heads of physical education in English secondary schools highlighted a range of issues related to fitness testing and monitoring. A range of authors internationally have found that physical education teachers use fitness testing as a means to promote health and fitness (Alfrey and Gard, 2014; Cale et al., 2014; Hopple and Graham, 1995; Keating and Silverman, 2004). They went on to warn that 'if the dominance of fitness testing and some of the questionable practices revealed in this study are typical, and if monitoring is conducted uncritically and in isolation' then this practice is unlikely to lead to the intended goals of enhanced health and fitness (Cale et al., 2014: 395). Cale et al. (2014: 395) conclude that for fitness testing to contribute in a valuable way to a broad and balanced physical education programme then 'teachers need specific guidance and support' (e.g. illustrations of practice, professional learning).

Whilst we have shared research findings that prompt us to problematise fitness testing as physical education, we must also caution that it would be remiss of us to talk in universal terms. Larsson and Quennerstedt (2016) warn, for example, that all is not always as it seems. They suggest that whilst fitness testing occurs in Sweden, it takes on a different form in comparison to other countries such as the US, England and Australia (Larsson and Quennerstedt, 2016: 65). They posit that whilst many teachers in the aforementioned countries use fitness testing as a way to record fitness, make commentary on health status, and in some cases assess students' standard of physical education (Cale et al., 2014), in Sweden the logic of this practice is 'one in which the results are aimed at the students' via an 'enjoyable' experience (Larsson and Quennerstedt, 2016: 77).

Following a brief overview of some of the key international literature pertaining to fitness testing as physical education, the following section explores the literature that has explored what ties physical education, the body and social theory.

Physical education, the body and social theory

In trying to understand the privileging of fitness testing within physical education, a Foucauldian lens, leaning on his earlier work at least, leads us to a relatively simple and arguably problematic explanation, namely that fitness testing exists as a disciplinary and corporeal practice through which physical education teachers hope to shape and have a 'hold over' the bodies of their students (Foucault, 1979: 138). More specifically, from this perspective teachers and other disciplining agents are intending to normalise and shape healthy and productive citizens (Foucault, 1978). It is worth noting that whilst physical education teachers are often positioned as disciplining agents, they too are produced through discursive practices (Webb et al., 2004).

A preponderance of Foucauldian-inspired scholars have tried to explain why physical educators think and teach in the ways that they do. For example, in his foundational work, Kirk (1998, 2000) charts the shifts in physical education's discursive and material mission in English and Australian schools from the Victorian period onwards. In summary, Kirk has the field moving through a set of overlapping but distinct historical phases that emphasised social order and the training and taming of working-class bodies, military readiness, progressive notions of child-centred play and, in particular, following the Second World War, competitive sport (Kirk 1998). Kirk has also described the shaping of physical education's intellectual foundations in the 1970s and 1980s away from education and towards human movement sciences, and its preoccupations with the

bio-physical body, intellectual prestige – particularly but not only in universities – and the medical health benefits of lifelong physical activity.

In broad historical terms, Kirk with colleagues has drawn predominantly on Foucault to argue that physical education's trajectory mirrors that of Western culture, such that '... a shift in corporeal power has been underway since the late 18th century in many 'western' countries, from an external form of power and locus of control to an internal form of power and locus of control' (Gard and Kirk, 2007: 17). For example, while Victorian physical education classes resembled military drills and attempted to dictate with ponderous precision the movements children were allowed to make, the increasing dominance of competitive sport after the Second World War reflected a 'looser' form – or informalisation (Wouters, 1986, 2011) – of control grounded in the assumed natural exuberance and creativity of children. Kirk's argument is that, despite shifting pedagogical practices, social order and control have remained physical education's underlying imperative. The modality for exercising this control is what changes. Following Foucault, Kirk argues that these changes are the 'product of the struggle by members of vying coalitions to secure a place for their field and for themselves in the academy and workplace' (Kirk, 2000: 35).

Also writing from a Foucauldian perspective, Wright has located physical education's historical and contemporary practices within discursive fields of power and knowledge. Looking at its history in Australia, she claims that the 20th century saw the gradual marginalisation of physical education's feminine traditions and the growing dominance 'of a masculine agenda, built around organized sport and the human movement sciences' that 'contributes to the (re)production of notions of women being "weaker" and "lacking" in relation to male superior strength and skill'. (Wright, 1996a: 331). In other work, Wright presents ethnographic accounts in which a range of verbal, spatial and intellectual strategies were deployed to normalise and reinforce gender hierarchies in physical education classes (Wright, 1996b, 1997). Combining feminist and Foucauldian theory, Wright's scholarship sees physical education as a site where struggles for gendered power occur constantly at both the official and enacted curriculum levels. With respect to this paper's specific focus, Wright (1997), and subsequently Fullagar (2002), characterised fitness testing as an expression of knowledge/power, and a material example of the 'outside-in' disciplining of students' bodies towards gendered bodily norms. In her later works, Wright, like many Foucauldian scholars, takes up issues of agency by engaging with Foucault's concepts of technologies of the self and care of the self (see, for example, Wright (2009)).

Taking the work of David Kirk and Jan Wright together, the somewhat unavoidable conclusion to draw from this Foucauldian-inspired work is that physical education can be understood as being created and existing in order to discipline and govern students in particular ways. This, presumably, is why the focus of their scholarship is on the strategies and techniques of knowledge and power, and why the role of the individual subject seems limited either to resistance or being (self) disciplined by cultivating the capacities ascribed to, and inscribed, on them. As Van Krieken (1990) suggests, Foucault, like Weber before him, argued that the exercise of disciplinary power is enacted by a range of structures that 'translate' the changing nature of society into material social practices. Physical education, then, can be seen as an evolving microcosm of ideologies and corporeal practices that are coercively deployed with rational disciplinary goals as their intended outcome. In this context, the growing influence and prestige of the human movement sciences in physical education during the second half of the 20th century generated new forms of corporeal discipline, of which fitness testing is one example.

Whilst it is not our intention to present a direct comparison between the work of Elias and Foucault, much of the existing sociological work relating to physical education and the body takes

on a Foucauldian flavour, and it would thus be remiss of us not to engage in some degree of dialogue. At this stage it is probably important to highlight that other theorists have been used by scholars to advance our understandings of physical education and the body, with one notable example being Bernstein (e.g. Penney and Evans, 1999).

Returning to the aforementioned dialogue, according to Dolan (2010: 9–10) both Elias and Foucault in his later work ‘sought to explain the constitution of subjectivity’ but both did so in different ways and therefore defy direct comparison. He went on to highlight that Elias and Foucault asked similar questions in relation to the subject, and ‘by relating their respective explanations, the value and limitations of each come into sharper relief’ (Dolan, 2010: 10). There are important differences between Elias and Foucault. Firstly, and perhaps most importantly, they conceptualise the relationship between the individual and society in different ways. From an figurational perspective it is important to see a ‘figuration’ of interdependent beings as a dynamic concept that is continually in flux and characterised by numerous, multi-directional, processes and balances of power. According to Murphy et al. (2000: 92), Elias’ concept of figuration allows for the processual nature of societies to be emphasised and for human beings to be viewed as *homines aperti*, or ‘people bonded together in dynamic constellations’. In contrast to this relational and temporal approach to understanding social life, Foucault in his early work – upon which many physical education scholars have relied – appears to focus more on the way power relations operate in social contexts and how normative discourses are governed through discursive formations in physical education school policy and pedagogies. Those leaning more on Foucault’s early work such as *Discipline & Punish* (Foucault, 1977), for example, have examined the role of governmentality, where the embodied self is socially and discursively constituted in relation to particular discourses operationalised at the macro level (e.g. Welch and Wright, 2011). Scholars deploying Foucauldian theoretical frameworks might be interested in the social consequences of this, the ways in which discourse variously constitutes different sections of the population (for example, are some people privileged?) The consequences of these governmental agendas are examined for the effects on young people’s sense of self, for instance guilt and shame associated with biopedagogies in relation to food, exercise and weight (Welch et al., 2012; Wright, 2009; Wright and Halse, 2014).

While there is now a long-standing Foucauldian tradition in physical education research concerned with corporeal knowledge, experience and institutional regulation (e.g. Webb and Quennerstedt, 2010; Wright, 2000), we feel that more can be done to theorise the privileging of fitness testing as a context for physical education. After presenting a brief overview of relevant literature our purpose here is three-fold. Firstly, to briefly outline the key principles of figurational perspectives before, secondly, discussing the ways in which Elias’ work can help us understand the privileged position of fitness testing in physical education, specifically in relation to the processes of ‘scientisation’ and ‘shaming’. Thirdly, we contribute towards a theoretical discussion about how physical educators have come to think about and enact fitness testing in the ways that they do. The theorising articulated in this paper, together with the sociological work it follows, can help us move forward in terms of pedagogical possibilities for physical education. We turn now to Norbert Elias and figurational sociology in particular.

Norbert Elias and figurational sociology

Like other sociologists such as Goffman (1959), Foucault (1977) and Bourdieu (1984), Elias made a significant contribution to 20th century scholarship about the body, power and control. He

developed figurational sociology in which the central concept of 'figuration' is used to describe the inescapable and complex nature of human interdependencies. A number of authors have presented detailed analyses of Elias' work on figurational sociology (Goudsblom, 1977; Maguire, 1988; Mennell, 1998), the guiding principles of which can be summarized as: (a) an understanding of social life as comprising unintended consequences of intentional human actions formed in unintended social networks or figurations; (b) an approach to human beings as interdependent, forming figurations or networks with each other; (c) a concern with dynamic processes of development and change, rather than static states (e.g. societies will never be civilised, only ever enmeshed in a multi-directional process of civilising and de-civilising); and (d) power is an inherent component of all social relations or interdependencies. Figurational sociology has proved useful in understanding social phenomena as diverse as pleasure in early childhood education (Leavitt and Bauman Power, 2008) and physical education teachers' philosophies about their subject (Green, 2002).

Elias is perhaps best known for his work on *The Civilising Process* (Elias, 1994 [1939]), which suggests that since the medieval era, chains of social interdependency have multiplied and become more complex, and human behaviour has increasingly been characterised by a growing social constraint towards self-control. That is to say, individuals in Western nations have progressively internalised notions of self-regulation to avoid behaviours that may be viewed as undesirable or 'uncivilised' in the presence of others (e.g. violence and picking one's nose). According to Elias (1994 [1939]) this lowering of our 'threshold of repugnance' is indicative of ongoing and multi-directional civilising processes.

The process of 'civilising' can be used to refer to a wide range of practices including levels of technology, habitus and manners, religious customs, bodily cleanliness and the way sports are played (Dunning and Hughes, 2013). Elias warned that civilising has not taken place at the same rate and amongst all people in all parts of the world. Members of the higher strata of post-medieval Western society, for example, developed new and more controlled patterns of behaviour, indicative of a civilising of their shared cultural habitus, in order to distinguish themselves from the lower strata. The concept of habitus is central in understanding social life. The sociogenesis of habitus (or the processes that have led to its occurrence) include dynamic human interdependencies that correspond to individual differences that can be observed over time.

In discussing civilising processes, Elias (1994 [1939], 1995) illuminated a relationship between shared habitus, self-control and shame. For him, the 'blindly functioning' mechanism of self-control represents a learned response, or habitus, which predisposes individuals to utilise and experience their own bodies in particular 'civilised' ways, thus avoiding shame. From a figurational perspective, the consolidation of a shared cultural habitus that is characterised by self-restraint is regarded as a 'psychogenic' change aligned with broader civilising processes (Elias, 1994 [1939]). This change was accompanied by what Elias termed a 'sociogenic' change or 'sociogenesis', which refers to the long-term multi-linear processes that have led to the occurrence of a particular social phenomenon, such as the expansion of scientific thinking in Western societies.

The theory of the civilising process (Elias, 1994 [1939]) has been used as a lens through which phenomena related to the body can be explored and understood. Atkinson, for example, has applied Elias' theory to the art of tattooing (Atkinson, 2004) and a brand of asceticism known as 'straightedge' (Atkinson, 2006). More recently, Stuij (2011) has drawn upon concepts of self-control and 'civilising' to better understand reported trends of increased body weight in the UK, the USA and the Netherlands. Bringing the focus back to physical education, we argue that the concept of habitus, and arguably of 'civilising' more broadly, can be usefully deployed to explain how the

corporeal practice of fitness testing has become so deeply entrenched in the classroom practices of physical education teachers (in the UK, North America and Australia). That is to say, a specific shared habitus predisposes physical education teachers towards fitness testing as a context for learning. The habitus, reinforced by ideologies and context, is so pervasive that teachers continue to privilege fitness testing despite a lack of curriculum imperatives (in Australia and the UK, at least) or evidence to support its educational value.

Viewed from a figurational lens, fitness testing is a historically rooted practice that is embroiled in a complex web of processes (e.g. physical education as a means for developing social order (Kirk, 1998)). Elias' work on the civilising process suggests that over generations people became more 'self-steering' and restrained through increased interdependencies with more and more people. That is to say that the notion of self-steering suggests that we restrain ourselves because we are increasingly interdependent on others within our figurations. Using a figurational perspective we are encouraged to identify particular social processes that could help us understand why physical educators privilege and justify the use of fitness testing in the ways that they do. We now turn attention towards the historically rooted processes of scientisation and shaming that have featured in the work of Elias and other figurational sociologists but are yet to be used to better understand the physical education figuration.

The scientisation of physical education

For Elias (1982, 1995), the civilising and evolution of societies was closely connected with their scientisation and technisation. He viewed scientific knowledge as being produced by inter-dependent human beings in particular social settings, the unplanned dynamics of which display three characteristics: (a) a long term trend towards specialisation; (b) power and status differentials between the various specialized disciplines; and (c) the tendency of 'scientific establishments' to develop professional ideologies that serve to enhance the status of particular disciplines (Elias, 1982). In a physical education context, we can see the relevance of this commentary if applied to the shift in the 1950s towards human movement sciences and its preoccupations with the bio-physical body (Kirk, 1998, 2000). That is to say, physical education in some countries has become increasingly specialised with a greater focus on, and status afforded to, human movement sciences and quantitative evaluation (Gard and Wright, 2001). Elias viewed the development of science 'as a product of competition and power relations between various scientific communities' (Van Krieken, 1998: 135) and we can thus see the relations between the privileged (e.g. movement science) and the marginalised knowledges (e.g. sociology) as a part of a broader process of scientisation and quest for status.

The privileged status of 'hard' science within physical education has been reinforced in a number of ways, not least via prevailing ideologies that are entrenched and recycled within and beyond the physical education profession. For example, the manifestation of such ideologies was evidenced by Alfrey and Gard (2014), whose findings from Australia suggested that some teachers invoked the objectivity of science to validate their use of fitness testing. Using a figurational lens we are encouraged to explore how particular social processes are enabling and/or constraining, and for whom. Regarding the scientisation of physical education, for example, it could be seen as more broadly enabling for those within the profession in that it has allowed for enhanced status of the subject across school, society and policy levels. At the same time, however, scientisation appears to have been constraining for those within the profession whose philosophies and expertise do not immediately align with the sub-disciplines of human

movement sciences and quantitative evaluation. Those who align with the more marginalised sub-disciplines of physical education, such as sociology (Flintoff et al., 2008), continue to be constrained, with particular ideologies that sustain the privileging of human movement sciences being perpetuated as fact (e.g. fitness testing is a valid and objective way to measure health). The balance of power continues to be in favour of those aligning with the 'hard' science dimension of human movement, and this, we argue, leads to the prevalence of one privileged way of seeing and doing physical education. This can have implications for physical education teachers and learners across school and university contexts.

Just as no human is ever entirely disconnected, social processes rarely occur in isolation. Whilst this section has focused on scientisation, we can see the overlap with the resurgence of medicalisation (see Green, 2002) (i.e. physical education as a tool to promote wellness), which is also linked to technologisation and the preoccupation with measurement (Gard and Enright, 2016). Gard and Wright (2001) highlight that the monitoring of fitness and measurement of body shape and size have been persistent features of physical education since the late 1970s. They refer to Burns (1993) to suggest that obesity discourses have contributed to particular modes of regulation within physical education, not least 'the measurement and comparison of children and young people with culturally constructed norms which have questionable validity, particularly in relation to determining the present or future health of individuals' (Gard and Wright, 2001: 546). The findings presented by Alfrey and Gard (2014) suggest that teachers often assume that the measurement and comparison that often accompanies fitness testing can 'motivate', 'encourage' and 'drive' young people to change their behaviour in one way or another. For us, the perhaps unintended process of shaming is important here, and will be discussed below.

Shaming in physical education

The use of fitness testing in physical education is sometimes falsely predicated on beliefs about young people's lack of self-control or motivation. What is perhaps unintended and compounding, however, is the shame that circulates physical education, and arguably fitness testing, in sometimes damaging ways (De Pian, 2012). Shame has been discussed by scholars such as Charles Darwin and Erving Goffman, but Scheff (2004) suggests that it remains under-theorised. According to Mennell (1992), shame is a kind of anxiety that is automatically reproduced. It is 'a fear of social degradation, the fear that one's own behaviour will cause others to express disdain, withdraw their approval, or in some way assert their superiority' (Mennell, 1992: 105). Freud proposed two ideas that appear to have strongly influenced Elias: (a) the concept of repression; and (b) that shame, amongst other emotions, were agents of repression (Scheff, 2004). Drawing upon the work of Elias, Scheff (2004: 231) stated that shame is the agent of repression, and repression is 'the central motor of human development and emotional illness'. Whilst Scheff sees shame as the 'master emotion' it is important to state that Elias did not. For him it was important to explore a range of emotional processes depending on the social context and the phenomenon under analysis. Fitness testing, for example, can have both 'positive' and 'negative' outcomes including shame, pride, humiliation and/or education and inflated confidence, depending on the individual and the resources available to them.

From our reading of Elias, we would argue that he helps us see shame as a multi-dimensional concept, having both positive and negative consequences. He viewed shame as one of many mechanisms for change and viewed it as instrumental in the civilising of modern societies. Similarly, it seems, based on an admittedly small sample, that shame is being used, albeit

unintentionally, as a means of motivating young people to be fit and healthy. Theorising aside, we must tread carefully. Van Daalan (2005) has identified physical education as a source of 'constant shaming' for girls, and De Pian (2014) found that shame, as well as other such affective responses, is a powerful but damaging source of motivation that urges young people to adopt sometimes problematic health behaviours. From a figurational perspective, and acknowledging the ways in which teachers have discussed this issue (see Alfrey and Gard, 2014), it could be that shaming has emerged as both an intended and unintended consequence of fitness testing in physical education, depending on the changing interdependencies of the time. That is to say, some teachers may use the process of shaming (under the guise of 'motivating') as a means to make young people and their parents accountable for their fitness, whereas others are more careful of causing offense; they are ashamed of causing shame (Alfrey and Gard, 2014). Similar processes have been found at play in health education contexts by Leahy (2014), who stated that the risk of 'shame' is used by some teachers to prompt students to develop strategies to avoid the 'shameful' consequences. In the context of fitness testing, language of risk could relate to, for example, health, fitness and fatness.

We can see that shaming can be constraining for people who are not 'friends' of physical education, and thus not 'pretty, active and ideally white' (Azzarito, 2009: 19). Whilst the quote from Azzarito (2009) over-simplifies a very complex and historically rooted phenomenon, the key point is that shame circulates physical education (De Pian, 2014; Van Daalan, 2005), and it appears to be directed towards those who do not perform to particular standards (e.g. a specific stage of the beep test, indicating a level of cardiovascular fitness). The work of De Pian (2014), Leahy (2014) and Van Daalan (2005) suggests that this can constrain the health and wellbeing of young people who are exposed to shaming. We acknowledge that shaming could be enabling for some (e.g. members of the fitness industry) but this is beyond the remit of this paper. Even if there are some enabling consequences of fitness testing in its usual form (shining a light on individual inadequacies with the view to 'motivating' young people to get fitter and healthier), school physical education is not an appropriate place to roll the dice to see if it lands on 'motivating' or 'shaming'.

Thus far we have largely focused upon young people in the physical education figuration, but it is important to acknowledge that the shaming process can extend beyond them. Data presented in Alfrey and Gard (2014), for example, suggests that some teachers used fitness testing as a means of shaming parents into responding to the perceived health status of their child. One teacher, for example, stated that

Fitness test results should go to parents. Parents should be accountable for their child's health. The child's results should be sent home and also the national 'norms' for each test. It might help parents to see how their child actually compares to others. It could make parents change the family diet, or even book their child into a sporting club (Alfrey and Gard, 2014: 11–12).

Again, understanding this issue through a figurational lens we can begin to see the tip of the iceberg, or figuration, and acknowledge that shaming processes transcend the physical education lesson. They extend into the dynamic networks within which young people, teachers, parents, school administrators and politicians are embedded.

One of the prevailing ideologies that appears to have contributed to the veil of shame shrouding physical education and fitness testing in particular is 'healthism'. Writing about the ideology of healthism, a term originally coined by Crawford (1980), Kirk and Colquhoun (1989) explained that 'health has become a symbolic category of considerable importance' and 'a particular view of health as corporeal and individualistic has become pervasive within the new health-consciousness'

(Kirk and Colquhoun, 1989: 417) in schools and society more broadly. Since this early work, the concept of healthism has featured in critical physical education literature with some scholars suggesting that healthism is, at least in part, characterised by the view that health has become enmeshed with notions of personal conduct, the absence of which opens the individual to moral censure (Gard and Wright, 2001; Webb and Quennerstedt, 2010; Webb et al., 2008). Ideologies such as healthism can be a dangerous amalgam of myth and reality (Green, 2003) and, if unchallenged, they become embedded in both rhetoric and pedagogy and come to influence the physical education experiences of young people (Green, 2003).

Having used a figurational lens to identify scientisation and shaming as two social processes that can help us understand why physical educators use fitness testing as a context for learning, we now draw upon some of the abovementioned figurational principles to further theorise this phenomenon.

Discussion

The persisting prominence of fitness testing as a context for physical education in contemporary Western societies, despite such a critique, suggests that there are powerful processes at play here. In terms of trying to explain the nature and extent of fitness testing in physical education we believe that figurational sociology provides an interesting lens through which to understand this phenomenon. If drawing upon the work of Elias then we need to admit that the prominence of fitness testing in physical education represents an expression of processes that goes beyond individuals, societies or points in time. A figurational lens helps us to go beyond the labelling of fitness testing as ‘disciplinary’ and encourages us to view this practice as historically rooted and embroiled in a complex web of processes. Moreover, it sensitises us to the importance of social interdependencies, power and habitus when trying to understand the world we live in, and encourages us to identify both the intended and unintended consequences of fitness testing, and how these are enabling and constraining and for whom. We will now elaborate on how applying a figurational lens: (a) encourages us to view fitness testing as a historically rooted practice; (b) sensitises us to the importance of social interdependencies and habitus when trying to understand their prevalence; (c) helps us to go beyond the labelling of fitness testing as ‘disciplinary’ and encourages us to identify the (un)intended consequences of fitness testing, and how these are enabling and constraining and for whom. It really is quite un-figurational to separate complex social processes, but for the purpose of clarity we will attempt to briefly expand upon three of the ways in which figurational sociology can illuminate the complexity of an apparently quite ‘normal’ and expected feature of physical education.

Fitness testing as a historically rooted practice

Aligning with Kirk (1998), and in relation to the first point above, we posit that fitness testing is an example of historical debris; times have changed but fitness testing continues to tie physical education to the past. The issues that physical educators are facing have changed over time – ranging from preparation for the Second World War in the 1940s to obesity in the 2000s – but fitness testing is a persistent response. Drawing upon Elias, we posit that the shared cultural habitus of physical education teachers is one reason for this persistence.

Social interdependencies and habitus

Acknowledging the relative importance of social interdependencies and habitus can help us appreciate fitness testing as a practice that, to some extent, characterises the complex web of relationships known as the physical education figuration (Green, 2002). A shared habitus predisposes physical education teachers towards fitness testing as a context for learning. The habitus, reinforced by interdependencies (e.g. colleagues, students, their teachers), ideologies (e.g. fitness testing is a suitable way to educate) and context (e.g. school expectations to test and report), is so pervasive that teachers continue to privilege fitness testing despite a lack of curriculum imperatives (in Australia and the UK, at least) or evidence to support its educational value. Fitness testing is so pervasive in physical education in some countries because, amongst other reasons, it always has been. That is to say, it is a historically rooted practice that is so deeply engrained in the functioning of the physical education figuration that it will be incredibly challenging to up-root. A figurational perspective encourages us to focus on the relationship/s between the prevalence of fitness testing in physical education, social interdependencies and habitus, and this, we argue, allows for an alternative analysis of the fitness testing phenomenon than that which has been presented in the existing literature.

Unintended consequences

Elias encourages us to explore both the intended and unintended consequences of any social process. With fitness testing in mind, we know that some of the reasons for its inclusion in physical education programmes include pragmatism (i.e. it is easy to administer and it is a 'normal' part of physical education) and scientisation (i.e. testing is a way to use 'hard' science to motivate learners to be more healthy) (Alfrey and Gard, 2014). Data from Alfrey and Gard (2014) suggest that behaviour change is an intended consequence of fitness testing, with one teacher explaining:

We will use the fitness testing generally twice a year just to help motivate them and see the improvement . . . It is really easy to run and it is really easy to see how kids score. It is also a really good way to see improvement and to motivate kids, if they are tested three times a year and are improving, it can be a really great tool in that way (Alfrey and Gard, 2014: 11).

As previously discussed, it could be that shaming has emerged as both an intended and unintended consequence of fitness testing in physical education, depending on the changing interdependencies of the time. In recent years, health and physical education scholars have discussed, in particular, the circulation of shaming in health education (De Pian, 2012; Leahy, 2014). Indeed, the work of Van Daalan (2005) and De Pian (2014) provide an interesting point of departure for understanding how affective responses such as shame may be an unintended consequence of 'motivating' young people to become stronger, faster and fitter. What figurational sociology helps us to do is understand the shaming process as a consequence of an amalgam of socio-historical processes, but also that shaming can have unintended consequences of both a positive and a negative nature (Elias, 1994[1939]). In terms of fitness testing, for example, depending on the learner and the learning intention, shaming, intended or not, may motivate (as suggested by the quote above) or marginalise certain types of students.

As we stated at the outset, much of the sociological work in physical education has had a strong Foucauldian flavour, and in offering a figurational perspective we feel that new insights and alternative nuances have been illuminated. That is to say, the privileging of fitness testing goes

beyond governmentality and can be seen as being connected to a shared cultural habitus that incorporates social interdependencies, individual psychology and an amalgam of historical and multi-directional processes (such as scientisation). Elias wanted to open our minds to social processes and relationships – *homines aperti* rather than *homo clausus* (Elias, 1978). Moreover, we feel that Elias has a more networked understanding of power, and thus allows for a more messy analysis than some of Foucault's work, for example, allows.

Conclusions

Fitness testing is one example of historical debris that serves to maintain the tradition of corporeal regulation in physical education (Fullagar, 2002; Kirk, 1998). The work of Foucault and Foucault-inspired scholars (e.g. Kirk, 1998; Wright, 2009) has been seminal in terms of the ways in which it has allowed for increasingly sophisticated understandings of fitness testing and, more broadly, processes of regulation within physical education. What this paper has demonstrated is that a figurational analysis can reveal new insights and alternative nuances on this same issue. Using a figurational lens to theorise the ongoing prevalence of fitness testing in physical education helps us understand why it is an enduring feature of contemporary physical education across Western societies. It helps us to go beyond the labelling of fitness testing as 'disciplinary' and encourages us to view fitness testing as a historically rooted practice that is embroiled in a complex web of social processes. That is to say, figurational sociology prompts us to go beyond the function of fitness testing and explore the ways in which it has emerged as a pervasive practice in physical education. To add to the existing scholarly work in this space, figurational sociology sensitises us to the importance of social interdependencies and habitus when trying to understand the world we live in, and encourages us to identify both the intended and unintended consequences of fitness testing, and how these are enabling and constraining and for whom. For example, from the perspective of some physical education teachers, fitness testing *enables* them to motivate young people to become fitter and healthier (Alfrey and Gard, 2014; Hopple and Graham, 1995), but for the young people participating in the testing, they may feel *constrained* and shamed, depending on the resources they bring to the experience. A figurational lens encourages us to acknowledge that the prominence of fitness testing in physical education represents an expression of processes – such as scientisation and shaming – that go beyond individuals, societies or points in time. This is significant because, in trying to articulate a way forward for physical education professionals, we can acknowledge that a multi-layered approach, over an extended period of time, would be necessary.

In this paper we have highlighted how the shared habitus of physical education teachers, reinforced by ideologies and context, is so pervasive that they continue to privilege fitness testing despite a lack of curriculum imperatives or evidence to support its educational value. The key questions at this stage are: can this phenomenon be disrupted and, if so, how, when and by whom? We need to move beyond the critique of fitness testing towards a better understanding of the processes that have led to its prevalence, as well as starting to plan for ways in which fitness testing could be used in safe and educational ways (Cale et al., 2014). Whilst this paper has helped us better understand fitness testing as a persisting phenomenon, we call for more empirical work in this space, with a focus on: (a) the intended and unintended consequences of fitness testing; (b) the enactment of fitness testing in school physical education; and (c) the views of young people on fitness testing as a context for learning. It is not our intention to demonise fitness testing per se, nor to discuss this practice in universal terms, but to instead extend critical discussion and reveal complexities around the extent to which this practice contributes to authentic learning outcomes

for the young people participating. The theorising articulated in this paper, together with the sociological work it follows, can help the profession continue to move forward in terms of pedagogical possibilities for physical education. As alluded to above, figurational sociology can illuminate the complexity of an apparently quite ‘normal’ and expected feature of physical education, and prompt us to acknowledge that to respond to the prevalence of fitness testing will require a focus on figurations – including teacher educators, professional governing bodies, school managers – and not the teachers in isolation.

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