

**Understanding body image in physical education: Current knowledge and future directions.**

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## **Abstract**

Body image disturbance in children and adolescents has negative implications for psychological and physical well-being. To positively impact well-being, it is important to explore factors that influence body image and to identify strategies that can be used to reduce body image disturbance. The school curriculum can play a significant role in shaping how children and adolescents experience their bodies. Within this school curriculum, physical education lessons represent one of the only school subjects in which the body is a focus of curricular outcomes. In physical education, the body is judged for physical ability but is also situated in a space that provides the potential for social comparisons and body judgements. Significant attention has been paid to the development of classroom-based interventions that aim at reducing body image disturbance, yet physical education has largely been ignored as a context in which one can effectively intervene. This paper reviews current knowledge on the relationship between physical education and body image disturbance by using the cognitive-behavioural model of body image developments as a guiding framework. It also considers the contribution that physical education could make to wider school based interventions.

## **Keywords**

Body image, physical education, body satisfaction, intervention, schools

## **Introduction**

Physical education lessons represent one of the few school subjects in which the body is a focus of curricular outcomes. The body is judged for physical ability but is also situated in a space that provides the potential for social comparisons and body judgements. This is because the body is situated at the centre of experiences in physical education. Therefore, it is not unlikely that some youngsters may experience body image disturbance in physical education. Body image disturbance refers to any form of disturbance that relates to physical appearance (Thompson, 1995). Indeed, it is established that social contextual factors within physical education influence emotional and behavioural aspects of body image such as social physique anxiety (Cox et al., 2011) and body avoidance behaviours such as concealing the body with clothing (Carmona et al., 2015). Furthermore, it has been proposed that physical education could be used as a site for positive body image interventions (Duncan et al., 2004). As of yet, the adoption of physical education as a body image intervention site appears to have been overlooked in favour of a more traditional classroom-based approach such as Personal, Social and Health Education lessons in the United Kingdom (All Party Parliamentary Group on Body Image, 2012).

Given the alarming levels of body image disturbance in children and adolescents reported (e.g. Dion et al., 2016; Wethiem and Paxton, 2011), and the negative outcomes associated with body image disturbance (e.g. Almeida et al., 2012), the overarching aim

of this paper is to explore how future body image interventions to be delivered through physical education programmes could help reduce or prevent body image disturbance among young people. This paper will first explore the ways in which body image disturbance and related phenomena have been defined. The paper will then position body image disturbance as an area of research priority by discussing the prevalence and consequences of body image disturbance in children and adolescents. Next, the paper will discuss situational and social factors within physical education that have the potential to trigger body image disturbance. This will be realised by applying a cognitive behavioural model of body image developments (Cash, 2002) to the existing literature. The paper will finally overview the findings of body image interventions in physical education and discuss how these findings could be used to inform broader school based interventions. Understanding how body image disturbance relates to young people's experiences of physical education would allow for the development of pedagogical strategies to support pupils who experience body image disturbance in physical education. Also, in line with recent interest from policy makers, physical education has the potential to act as an integral component of school based interventions to more broadly encourage and promote a positive body image, and prevent body image disturbance.

### **Conceptualising body image disturbance and related phenomena in physical education**

The term body image was originally defined by Paul Schilder as ‘the picture of our own body which we form in our mind, that is to say, the way in which the body appears to ourselves’ (1950:11). Body image is said to consist of an attitudinal and perceptual component (Paap and Gardner, 2011). Attitudinal elements relate to satisfaction or dissatisfaction with body shape or size and perceptual elements relate to body shape or size estimation. Paap and Gardner (2011) argue that both components require measurement when exploring body image. Body image disturbance is then defined by Thompson (1995) as “... any form of affective, cognitive, behavioural, or perceptual disturbance that is directly concerned with an aspect of physical appearance” (p. 120). Body image disturbances are highly prevalent in children and adolescents. For instance, a recent study indicated that 57% of boys and 57.7% of girls are dissatisfied with their bodies (Dion et al., 2016). The main difference between body image disturbance in males and females is associated with the underlying processes of dissatisfaction. Female body image dissatisfaction is generally associated with a desire for a thinner physique (Dion et al., 2016; Tiggemann, 2004), whereas male body dissatisfaction results from either a desire to be more muscular or a desire to be thinner (Dion et al., 2016; Ricciardelli and McCabe, 2003). These differences in dissatisfaction align with the notions of dominant forms of femininity and masculinity, respectively. Gender specific body norms and the subsequent internalisation of these norms is important for understanding body disturbances in boys and girls.

While some researchers have focused on the trait components of body image disturbance, that is those components that hold stability cross-contextually, body image disturbance can also be viewed from a state perspective. From a state perspective, body image is examined as an unstable phenomenon, sensitive to influence from proximal events and processes (Farrell, Lee, and Shafran, 2005; Legenbauer, Rühl and Vocks, 2008; Tiggemann, 2004). This difference between trait and state body image can be aligned with the cognitive behavioural model of body image development and experiences (Cash, 2002). This model suggests that an individual's body image is constructed through a combination of proximal and historical events. Historical factors can be predispositions or past experiences which impact upon cognitions and affective responses to bodily experiences. Proximal factors include activating events that fuel information processing relating to self-evaluation of appearance. Examples of proximal events include social scrutiny (e.g. others evaluating your body), the threat of social comparisons (e.g. comparing your body with others), body exposure (e.g. in the dressing room), exercising (e.g. swimming) and wearing particular clothing (e.g. physical education kit) (Cash, 2002). While clearly there are cues within physical education that potentially cause body image disturbance in youngsters, we note that there has been limited exploration of body image disturbance within physical education.

Consequently, the specific exploration of the body image subcomponents of perceptual and attitudinal disturbance is relatively scarce within the physical education literature.

The outcomes of body image disturbance may be of particular interest to health psychologists due to the implications for psychological well-being and health related behaviours (Grogan, 2006). Moreover, associations between body image disturbance and physical activity outcomes may be of particular interest to physical educators.

Existing research suggests that adolescents with low body satisfaction are less likely to engage in organised sports and physical activity, and more likely to spend more of their time in sedentary pursuits such as television watching, in comparison to their peers who experience high levels of body satisfaction (Neumark-Sztainer et al., 2004). Higher levels of body image disturbance have also been associated with a range of negative eating behaviours such as anorexia nervosa (Levine and Piran, 2004), depressive mood (Paxton et al., 2006), low self-esteem (Van Den Berg et al., 2010) and future health risk behaviours such as smoking, dieting and over-exercising (Neumark-Sztainer et al., 2006).

### **Experiences of the body in physical education**

Physical education is a subject in which the body is a focus of curricular learning outcomes and so could be construed as a school site that presents risks for the development of body image disturbance, as well as opportunities for the development of

positive body image. For example, engaging in more physical activity is associated with lower body image disturbance (Neumark-Sztainer et al., 2004). In this regard, physical education engagement could be used to enhance body image. On the other hand, physical education presents stimuli and cues which have the potential to trigger state body image disturbance (O'Donovan and Kirk, 2008).

The physical education changing room could be deemed a proximal event or a site that is likely to influence state body image. Termed the process of 'classroom entry' by O'Donovan and Kirk (2008), the changing room presents a potential body image disturbance trigger due to exposing the undressed body to peers and the threat of social comparisons with other pupils. It has previously been identified that the changing environment influences experiences of physical education with the process of getting changed being identified as a perceived source of amotivation in physical education (Ntoumanis et al., 2004). Furthermore, changing rooms have been noted to impact attitudes towards physical education (Luke and Sinclair, 1991). It could be argued that the process of undressing in front of peers and the activating event of body exposure as outlined by Cash (2002) are likely to influence situational experiences of the body unique from any other educational environment.

Another potential activating event is physical education kit. Flintoff and Scraton (2001) explored 15-year-old girls' perceptions of and attitudes towards physical education. During interviews girls expressed dissatisfaction with compulsory kit and felt



uncomfortable when clothing revealed their bodies. Similarly, Ntoumanis et al., (2004) noted that feeling uncomfortable in kit was a perceived source of amotivation in physical education for 14-15-year-old girls. The theme of kit choice has also emerged in a qualitative review by Allender et al., (2006), in which it was evident that ill-fitting uniforms were a barrier to physical education participation. This research suggests that choice of physical education clothing may make girls feel more comfortable during physical education lessons (Velija and Kumar, 2009). The relationship between students and teachers regarding clothing and makeup has previously been identified as a 'battle' by O'Donovan and Kirk (2008), with girls resisting the school guidelines to express their femininity. However, this 'battle' could equally be considered a form of an appearance correction ritual (Cash, 2002). Through these strategies pupils may seek to regulate some of the appearance discomfort that they feel in the lesson. Prescribed physical education kit and school guidelines on wearing makeup may therefore prevent pupils from engaging in strategies that seek to alleviate some of the anticipated body image concerns.

Potential activating events within physical education are not solely isolated to the changing rooms and continue to present themselves as pupils begin to engage in the lesson. In this regard the coeducational lesson could be considered an additional body image activating event as it presents the opportunity for social scrutiny among and between boys and girls. In the coeducational setting girls have been reported to feel that

their bodies are under scrutiny from boys, which leads to reported increases in body anxiety (Flintoff and Scraton, 2001). When women anticipate the male gaze, resultant increases in body shame and social physique anxiety are apparent (Calogero, 2004). Moreover, girls place increased value on their physical appearance in the coeducational context (O'Donovan and Kirk, 2008). Girls also report increased self-consciousness about their bodies whilst engaging in physical activities in the presence of boys (Dwyer et al., 2006). Coeducational lessons have associations with avoidance of certain activities such as swimming (Flintoff and Scraton, 2001) with proposals to offer single sex lessons as a way of promoting girls' engagement in physical education (Allender et al., 2006).

Lesson content also has the potential to act as an activating event for body image. In sports and other physical activities where the body is overtly placed on display there is the possibility of increased body image disturbance. For example, in lessons such as swimming when participants are required to wear swimsuits (Burgess et al., 2006). A study exploring the experiences of adolescent girls at swimming pools reported girls' discontent with exposing their bodies, which was particularly relevant in the presence of boys, but girls also felt discomfort in the presence of other girls (James, 2000). The authors noted how most girls developed coping strategies when negotiating the swimming environment. They also identified a group of 'avoiders', which were those whom would rather face punishment than expose their bodies in front of other pupils.

Similar outcomes were identified by Whitehead and Biddle (2008) in their investigation of adolescent girls' perceptions of physical activity, in which swimming was identified as an area which provoked self-presentational concerns. The swimming environment was deemed threatening and therefore was avoided by many girls. The coping techniques girls employed included strategies such as trying to cover their bodies with towels and t-shirts. Adjustive reactions such as concealing the body or avoiding participation have been outlined as strategies that seek to regulate situational experiences of the body (Cash, 2002). The evidence in relation to lesson content suggests that swimming in physical education is likely to present situational disturbances in body image. Future research might productively explore the extent to which these issues are applicable in boys and across other lesson contents, where pupils feel their bodies are exposed to others' scrutiny.

This predominantly qualitative literature suggests that school physical education classes present several potential activating events that are likely to heighten concerns surrounding the body. There is little research, however, that makes explicit links between these factors and body image disturbance. It is often the case that inferences have to be made between an author's explorations of social contextual factors and theoretical links with body image development. We argue that the existing literature provides an incomplete understanding of body image disturbance within physical education and developing a complementary line of quantitative or mixed method

research would allow firmer conclusions to be drawn between body image disturbance and activating events. This evidence could be used to support broader school based interventions presented in mainstream psychological literature.

### **Body image interventions in physical education**

Although a meta-analysis has confirmed the effectiveness of exercise for ameliorating body image disturbance (Campbell and Hausenblaus, 2009), to date limited body image intervention work has been undertaken through physical education (but see Burgess et al., 2006; O'Brien et al., 2008). In a 6-week aerobic dance intervention study with 50 13-14-year-old adolescent girls, evidence was provided for the effectiveness of a body image intervention delivered through physical education (Burgess et al., 2006). The intervention was underpinned by the selection of an activity that sought to impact body satisfaction through the promotion of physical competence and confidence in a non-competitive environment. This consisted of an aerobic dance class that was performed twice a week for 6 weeks. This was compared with the regular swimming lesson of the same duration. The findings identified significant increases in physical self-perceptions and significant decreases in body image dissatisfaction following the intervention that focused on these competence enhancing activities. This study provides some preliminary evidence for the effectiveness of physical education as a vehicle through which to deliver body image interventions, through the promotion of competence enhancing activities.

Another 8-week body-focused intervention in physical and health education on social physique anxiety and self-objectification was undertaken with 85 Irish schoolgirls aged 12-16 (O'Brien et al., 2008). Participants were assigned either to a regular physical education class or an experimental condition that was underpinned by a body-focused curriculum. The intervention module consisted of a weekly classroom-based component (40 minutes) and also a physical education-based component (80 minutes). The classroom-based elements focused on engaging students with critical inquiry of the body and the physical education element emphasised kinaesthetic movements and the physical function of the body through dance and relaxation techniques. These practical activities were selected to allow the pupils to focus on the physical functions and capabilities of their bodies as opposed to physical appearance. Participants in the intervention condition noted significant increases in the importance placed on competence based attributes and decreases in appearance based attributes. This suggests that they had a greater awareness of what their bodies could do as opposed to how they looked. The control condition noted significant increases in social physique anxiety whereas the experimental condition showed no changes in levels of social physique anxiety post-intervention. The results provided further evidence for the effectiveness of integrating a body focused unit in physical education, as findings suggest that such units have the potential to reduce some of the developmental components of social physique anxiety.

The successful outcomes identified in these two interventions provide initial evidence to suggest that physical education can play a potentially beneficial role in future body image school-based interventions. Particularly applicable to the incorporation of physical education into wider school based interventions is the design of the study by O'Brien et al., (2008). The study integrated critical inquiry and psychological components alongside a combination of traditional classroom and physical education elements, a design which could be usefully utilised should physical education be incorporated into wider school based interventions.

### **The role of physical education in wider school-based body image interventions**

We have argued that there is the potential to influence body image outcomes through context-specific cues in physical education and the development of this line of inquiry should be a research priority. The extent to which manipulations in the physical education environment could then inform wider school-based body image interventions will now be considered. A recent review of classroom-based body image interventions outlined that most effective school-based interventions incorporated a combination of strategies within the same programme (Yager et al., 2013). For example, interventions such as 'Happy Being Me' included both media literacy and peer influence elements (Richardson and Paxton, 2010). The review paper also highlighted the successful approaches used in school-based interventions and reported that 86% of effective programmes incorporated an element of media literacy, 57% of programmes focused on

enhancing self-esteem and 43% of programmes incorporated elements around peer influence (Yager et al., 2013). The review urges for the adoption of a strategic approach to future interventions and suggests that one possible approach could be to extend existing interventions that have been established as effective (Yager et al., 2013). Taking this recommendation into consideration, the development of a body image focused line of research could allow for physical education to act as an extension to existing effective programmes, such as ‘Happy Being Me’ (Richardson and Paxton, 2010), ‘Dove Body Think’ (Richardson et al., 2009) and ‘MediaSmart’ (Wilksch and Wade, 2009). This may include using the successful classroom-based programmes outlined above with the addition of a physical education component. Elements such as increasing self-esteem and reducing peer influence can be easily transferred to physical education. It has been argued elsewhere that when appropriately presented, physical education can contribute to the development of self-esteem, social relationships and social behaviours (Bailey, 2006). Thus, physical education teachers have the potential to support pupils’ self-esteem and peer relationships. For example, using a self-determination theory perspective and through the satisfaction of the needs for autonomy and competence teachers are able to impact general self-esteem (Standage and Gillison, 2007).

Once clear strategy in which to develop body image interventions in physical education is to utilise the underlying premise in the interventions by Burgess et al., (2006) and

O'Brien et al., (2008). These body image interventions have been underpinned by enhancing perceptions of physical competence or focusing on the physicality of the body. It could be argued from the initial findings of others that fostering a physical education environment that promotes and encourages positive perceptions of physical competence may encourage a more positive body image and thus could be used alongside the strategies outlined in effective interventions (e.g. self-esteem and peer influence). Interventions such as these could create teaching environments that satisfy the basic psychological need of competence, as outlined by self-determination theory (Deci and Ryan, 1985, 1991). Specifically, this would involve teachers adopting competence supportive behaviours such as providing pupils with positive feedback, encouraging pupils to persist and providing students with clear guidelines (Haerens et al., 2013).

As previously explored, the changing room environment influences pupils' motivation toward physical education (Ntoumanis et al., 2004); therefore, is likely to be a key target for future physical education based interventions. It could be argued that this environment is an inevitable site of social comparison and body exposure that little can be done to prevent. The solution could be the implementation of structural manipulations that could lead to individual changing areas; however, in most cases, this is not a feasible option. Given this, we propose that teachers have a key role to play in 'policing' this environment, particularly in relation to the establishment of expected



codes of behaviour and challenging of normative discourses surrounding the body. For example, a socially normative behaviour in women is engagement in ‘fat talk’. Fat talk is a term applied to discuss the self-deprecating remarks that individuals make towards others regarding their own physical body size or shape (Nichter and Vuckovic, 1994). Exposure to fat talk conversations or engagement in these conversations can lead to elevated levels of body dissatisfaction (Stice, Maxfield and Wells, 2003). Although all pupils may not actively be engaged in fat talk conversations in the changing room the mere exposure to conversations is likely to be detrimental to body image outcomes; therefore, the ‘policing’ of this dialogue by teachers is likely to be beneficial. Initiatives such as Fat Talk Free Week<sup>®</sup> have been successfully implemented in undergraduate students. These initiatives have included pledges to reduce engagement in fat talk conversations (Garnett et al., 2014). Interventions such as these could be readily applied to physical education, by firstly increasing pupils’ awareness of the negative consequences of these conversations and by secondly encouraging pupils to resist, challenge and avoid these normative discourses.

Physical education was acknowledged by The All Parliamentary Group on Body Image (2012) to play a role in the promotion of positive body image, due to the established benefits of exercise on positive body image. The group proposed the need to increase the range of activities delivered through physical education to enhance physical activity and exercise participation. Alongside offering a range of activities within physical

education to increase participation, the current paper argues that contextual factors within physical education should be explored further to investigate how the physical education environment influences situational experiences of the body. While the utility of PSHE lessons for delivering classroom-based lessons is appropriate, physical education has the potential to provide an active learning approach to complement existing programmes. Furthermore, as we noted earlier, it is the only school-based subject in which the body is at the centre of all experiences; thus, if schools are being positioned as a key focus for body image interventions, we argue that physical education by objective should be considered.

### **The role of physical education in tackling body image disturbance**

This paper has outlined body image research in physical education and positioned this research as an area of further development with the aim of developing an evidence base to inform future interventions. We acknowledge that body image in physical education may appear to be like the ‘elephant in the room’: obvious yet overlooked or ignored. It could be argued that overlooking or ignoring body image in physical education is apparent not only in research but also in practice. Adjustive reactions by pupils in physical education that seek to minimise body image discomfort may not be encouraged or supported in practice by teachers. Pupils may be actively discouraged for engaging in strategies that might seek to alleviate some of the body concerns that arise in this unique environment. As evidenced, pupils are often discouraged from selecting their own

physical education kit and engaging in concealment strategies such as the use of extra clothing to cover the body. Avoidance has been identified by Cash (2002) as a key coping strategy to manage negative experiences of the body. This can be exemplified by the physical education non-participants or the note-bringers or those students that regularly disengage with physical education. A proportion of these students could be undertaking these avoidance strategies to reduce the risk of body image disturbance. It may be no coincidence that O'Donovan and Kirk (2008) identified a higher proportion of non-participants in swimming lessons, as this is an environment previously discussed to present potential activating events for body image disturbance. In order to develop strategies to alleviate body disturbance, research needs to be conducted that explores the exact nature of the relationship between the activating events and body image outcomes in physical education. However, physical education should not be given sole responsibility as the solution to all body image concerns but instead should be an integral component of wider school based interventions. As such, the unique way in which the body is at the forefront of outcomes in physical education and the potential contributions that this dynamic can play in educating children and adolescents about their bodies will need to be acknowledged.

## **Conclusion**

This paper has considered the role physical education might play in reducing or preventing body image disturbance, with the aim of developing an evidence base for the

construction of body image interventions. Physical educators, as well as teachers in other curriculum areas, have an important educational contribution to make in empowering young people to learn to value the physically active life (Siedentop, 1996). Integral to this process is young people learning to identify, negotiate and overcome barriers to participation including body dissatisfaction, through learning to value their embodied selves (Oliver and Kirk, 2015). It currently appears that there are two distinct bodies of literature available on body image issues in schools. This first is from a mainstream psychological perspective that implements body image interventions in schools, such as 'Happy Being Me' (Richardson and Paxton, 2010) and 'Everybody's Different' (O'Dea and Abraham, 2000). The second is a predominantly qualitative collection of pedagogically based literature that explores body related issues within the school context (Enright and O'Sullivan, 2013; Oliver and Kirk, 2015; Oliver and Lalik, 2004). Yet the exploration of the body image construct as defined in mainstream psychological literature has received relatively little attention in comparison to related yet distinct terms such as embodiment. Overall, this paper calls for the development of a systematic line of research underpinned by approaches such as the cognitive-behavioural model of body image developments (Cash, 2002). Research questions of future priority should further investigate body image triggers in physical education, such as teacher behaviours, class composition (e.g. peer relationships, coeducational lessons), teacher characteristics and lesson content, and their relationships with

participation and engagement. Once information is available on how contextual cues influence body image, evidence informed interventions can begin to be constructed.

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