

Psychological Support in a Post-Covid World in Relation to Physical Education

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Abstract:

The COVID-19 pandemic has impacted every part of life. The education sector has been especially disrupted by transmission mitigation strategies since schools were forced to rapidly modify practice from conventional face-to-face delivery to remote online learning. Physical Education is learning that takes place within the school curriculum where the context of learning is Physical Activity with the specific aims involving pupils 'learning to move' (i.e. developing competence) and 'moving to learn' (i.e. learning through movement) (Association for Physical Education, 2020). A significant body of work exists on how to support the basic psychological needs of young people in Physical Activity contexts. Future work utilizing online support and the creation of communities of practitioners hold significant potential (Lonsdale et al., 2019). Finally, recent moves to remote learning have heightened concerns for issues of equality. Thus, future work in this regard needs to address equality. Together, the work presented in this paper provides a basis for considering how the necessary restrictions faced by schools and move to remote learning have shed light on the potential for innovative approaches that can potentially overcome the criticisms of, and challenges faced by, Physical Education before the COVID-19 pandemic and as we move into the 'new normal'.

Keywords: COVID-19, Physical Education, Physical Activity, Psychological Support, Blended Gamified.

Introduction:

The COVID-19 pandemic has impacted every part of life. The education sector has been especially disrupted by transmission mitigation strategies since schools were forced to rapidly modify practice from conventional face-to-face delivery to remote online learning. The extent to which this shift was successful depended on the readiness of schools to rapidly deploy video conferencing and mobile technologies like Zoom, Google Classroom and Microsoft Teams. Some schools did well in this transition, but others struggled since they lacked key infrastructure and experience. As we start to look beyond the pandemic, interactive technological infrastructures will become increasingly important parts of the educational toolbox. This paper explores the potential of these tools for school physical education (PE).

The COVID-19 pandemic has emphasized the importance of physical health as a core educational aim. Physical activity, in particular, has been identified as highly beneficial for reducing disease severity and overall health (Hall et al., 2021). Within schools, the promotion of Physical Activity is considered a priority, with this objective being embedded within the subject of Physical Education (Haerens et al.,

2011; Metzler et al., 2013; Sallis et al., 2012). Despite this, there was significant uncertainty around the online delivery of Physical Education during periods of lockdown, with examples of online virtual Physical Activity sessions being used to fill the void for many. Given emerging findings which suggest that young people did less Physical Activity in lockdown, finding innovative ways to deliver Physical Education has never been more urgent.

Physical Education and Physical Activity:

Physical Education is learning that takes place within the school curriculum where the context of learning is Physical Activity with the specific aims involving pupils 'learning to move' (i.e. developing competence) and 'moving to learn' (i.e. learning through movement) (Association for Physical Education, 2020). Indeed, a focus on promoting participation with health-enhancing levels of Physical Activity in the immediate and more extended terms (i.e. later life) has increasingly become a core priority for the subject (Association for Physical Education, 2020). This is reflected by curricular documentation in the UK and other countries worldwide (e.g. Australian Curriculum, Assessment and Reporting Authority, n.d.; Welsh Government, 2020). Recovery from the recent global pandemic has only heightened the importance of health-focussed Physical Education. Yet, alongside such objectives, effectively delivered Physical Education is believed to be capable of achieving a broad range of learning outcomes across multiple domains (Bailey et al., 2009). Here, selecting different teaching styles and pedagogical models (e.g. Sport Education, Cooperative Learning) to target specific outcomes is considered best practice. In this regard, we focus predominantly on the role of Physical Education in promoting health and well-being (Haerens et al., 2011; Metzler et al., 2013; Sallis et al., 2012). Central to this objective is the promotion of lifelong engagement with health-enhancing levels of Physical Activity.

Physical Activity concerns any bodily movement that results in energy expenditure. To gain the associated health benefits, guidelines suggest that children and adolescents should participate in at least an average of 60 minutes of moderate to vigorous PA each day (World Health Organization [WHO], 2020). It is also recommended that vigorous PA and muscle and bone strengthening exercises are undertaken three days per week (WHO, 2020). In addition to being immediately beneficial for physical and mental health, participation in PA when young also has potential longer-term benefits via the tracking of PA behaviour to later life and by being protective against future co-morbidities (Janssen and LeBlanc, 2010; Poitras et al., 2016; Telema et al., 2014).

Many young people do not currently engage in recommended amounts of PA (Aubert et al., 2018). This is largely due to PA being engineered out of many parts of life, including in social settings and the family home (Katzmarzyk and Mason, 2009). The inactivity of young people has led to recent calls for urgent action, particularly during adolescence. In regard to these calls, the emergence of the corona virus pandemic has reversed/halted any progress that was being made (Hall et al., 2021).

Physical Education has significant potential for promoting Physical Activity engagement (Hagger and Chatzisarantis, 2016; Standage et al., 2012), yet the impact is often considered to be impeded by the limited curriculum time afforded to the subject and ineffective practices that have traditionally had a narrow range of focus, delivered in a highly performative culture. Despite the challenges, there remains

a firm belief that Physical Education can play an influential role in promoting healthy and active lifestyles. The recent global pandemic has only added to this enthusiasm and need. Physical Education now forms a key structured opportunity for all young people to engage in Physical Activity experiences that trained individuals lead. Further, Physical Activity is considered a vital element to combat the significant mental health issues associated with the necessary restrictions imposed on lives by the pandemic (McCartan et al., 2021). As we move beyond the pandemic restrictions, influencing PA behaviour over longer terms (i.e. healthy aging) should be considered a primary goal for Physical Education.

To promote Physical Activity, behavioural-epidemiological and socioecological perspectives suggest that rather than focusing on impacting behaviour directly, targeting factors associated with Physical Activity (i.e. correlates and determinants) is required to promote sustained behaviour change. Yet, to date, there is a lack of consensus on the correlates (i.e. variables associated or correlated with Physical Activity) and determinants (i.e. variables causally related to Physical Activity) of Physical Activity in young people, largely due to the complexity that results from the number of interacting components involved at multiple levels of influence (i.e. individual, interpersonal, organizational, community and policy). As such, it is suggested that theoretical and evidence-based approaches are used to identify how best to support sustained engagement with Physical Activity.

Psychological Support:

A significant body of work exists on how to support the basic psychological needs of young people in Physical Activity contexts. First, and given the focus on Physical Education within this paper, the Physical Education teacher represents a key and highly influential social agent in promoting autonomous motivation positive Physical Education experiences for children and their physical literacy. Evidence from meta-analyses and experimental studies show positive effects of teachers adopting need supportive strategies (e.g. Cheon et al., 2012; Owen et al., 2014; Vasconcellos et al., 2020). Indeed, many studies have demonstrated how training teachers to implement need supportive strategies leads to a wide range of adaptive outcomes for pupils (cf. Reeve and Cheon, 2021).

Specifically, and through a systematic programme of work, Reeve and colleagues (e.g. Reeve et al., 2004; Reeve et al., 2014; Reeve and Cheon, 2016) have identified seven autonomy-supportive instructional behaviours (ASIB) that teachers can adopt to support the development of autonomous motivation in educational settings. Teachers are encouraged to adopt instructional behaviours that take students' perspectives, invite students to pursue their interests, present learning activities in need-satisfying ways, provide explanatory rationales, acknowledge negative feelings, rely on invitational language and display patience (cf. Reeve and Cheon, 2021). In experimental work, the significant benefits associated with the adoption of ASIB for both teachers and pupils including need satisfaction, autonomous motivation, enhanced perception of skill level and Physical Education achievement have been demonstrated (e.g. Cheon et al., 2012; see Reeve and Cheon, 2021 for a review). Importantly, this body of work also demonstrates how teachers' use of autonomy support can be facilitated and enhanced through 'teach the teacher' interventions (e.g. Cheon et al., 2012; Reeve and Cheon, 2021).

Although research exploring the outcomes associated with autonomy-supportive teaching reveals that all three needs are supported when teachers adopt such approaches (Reeve and Cheon, 2021), researchers have also explored teaching behaviours that are independently associated with supporting the needs for competence and relatedness. For competence, creating structure through the provision of clear, contingent and consistent guidelines, optimal challenges, and timely and informative feedback that facilitates the achievement of positive outcomes are important (Grolnick and Ryan, 1989). To support the need for relatedness, demonstrating an interest and being emotionally available are considered valuable strategies (Ryan and Deci, 2017). Yet, in the absence of autonomy support, the provision of structure and being highly involved alone are unlikely to stimulate autonomous forms of motivation (Reeve and Cheon, 2021). Thus, adopting autonomy-supportive strategies can be considered vital for motivational teaching. More recently, research has demonstrated the potential motivating nature of perceived novelty (or variety) (Bagheri and Milyavskaya, 2020; González-Cutre et al., 2020; Sylvester et al., 2014; Vansteenkiste et al., 2020). Specifically, and related to PE, research has demonstrated that when teachers adopt novel strategies such as using novel materials, new technologies or carrying out activities in new environments, the autonomous motivation of pupils can be enhanced via the satisfaction for novelty (Aibar et al., 2021; González-Cutre and Sicilia, 2019).

In addition to exploring the range of need supportive behaviours within educational contexts, work in the health context is highly relevant to the delivery of Physical Education in schools. Recently, the range of need supportive strategies used to promote health behaviours and motivation have been systematically drawn together in motivational and behaviour change taxonomy. This taxonomy provides a systematic and unified way of identifying and evaluating the intervention strategies used, and to be used, within Physical Education programmes. Together, this work provides a core evidence base for informing the development of PE programmes that are rich in need supportive features.

In addition to the Physical Education teacher, research also supports the influential effect of friends on motivation and physical literacy. For example, in a sample of American adolescents, support from friends was found to be significantly related to adolescent PA (Zhang et al., 2012). Similarly, in a sample of UK adolescents, 90% of participants reported wanting to do more physical activities with their friends (Corder et al., 2013).

Given the complexity of implementing blended-gamified approaches to Physical Education, several factors require consideration to ensure the intervention is delivered as planned (i.e. fidelity). First, consideration is needed on how to support the delivery of programmes by Physical Education teachers. This will need to ensure that teachers are supported in developing necessary content, pedagogy and technology knowledge (Mishra and Koehler, 2006). Indeed, previous research has shown Physical Education teachers to report having difficulty or being unfamiliar with the technologies used (Goodyear et al., 2016). Successful implementation is likely to be heavily influenced by the matching of teachers' actual technological pedagogical content knowledge to that required to deliver the intervention programme effectively. Disparities in online delivery during the pandemic demonstrate the need to ensure appropriate infrastructure and training are in place. Future work utilizing online support and the creation of communities of practitioners hold significant potential (Lonsdale et al., 2019). Finally, recent moves to remote learning have heightened concerns for issues of equality. Thus, future work in this regard needs to address equality.

Conclusion:

Research has also shown that family members play an influential role in young people's motivation and Physical Activity behaviours. In a three-wave prospective study, autonomy support from parents was found to be related to young people's autonomous motivation towards leisure-time Physical Activity (Hagger et al., 2009). Further, explored the role of multiple social agents on motivation, reporting that social support (i.e. in the form of autonomy support, involvement and perceived modelling) from mothers, fathers and the Physical Education teacher positively predicted autonomous motivation directly and self-reported Physical Activity behaviour indirectly. More recently found that friends, family members and Physical Education teachers were influential in supporting adolescents' psychological need satisfaction and autonomous motivation within exercise contexts. Collectively, this work forms the backdrop for modelling the potential of blended-gamified approaches as the post-COVID-19 future of Physical Education.

We then provided a useful roadmap of the next steps in developing, evaluating and implementing such programmes. Together, the work presented in this paper provides a basis for considering how the necessary restrictions faced by schools and move to remote learning have shed light on the potential for innovative approaches that can potentially overcome the criticisms of, and challenges faced by, Physical Education before the COVID-19 pandemic and as we move into the 'new normal'.

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